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ABSTRACT

This overview focuses on two out of the six categories of organized youth sports; namely, agency-sponsored and interscholastic athletics. The discussion of the current status and proposed future direction of organized athletics for youth includes seven components of the problem: the role of youth sports in American culture; the role of athletic competition in youth development; education of youth sport coaches; injury prevention and safety in youth sports; patterns of participation and attrition in sports by adolescents; issues of gender in youth sports; and effectiveness of sports programs for adolescents. The discussion focuses on adolescents, especially those who live in high-risk environments. Programs that seem to be meeting specific objectives have been identified as a resource for those who seek models of effectiveness. Responses of youth to a survey about their experiences in organized sports are summarized. Among the findings are: progress toward true equality in sports opportunities regardless of gender has been made, but participation rates for boys continue to be much higher than those for girls; a commitment to provide progams for specific populations, such as low-income or minority groups, is absent from the mission, goals, and objectives of many national governing agencies; the potential benefits of competition are acknowledged, but whether these benefits are actually experienced by a significant number of participants depends largely on the quality of adult leadership; and competitive sports have the potential to produce negative effects, such as the disintegration of moral development. The paper concludes with 23 recommendations, divided among the following topics: Organization of Sports Programs (11 recommendations); Scheduling of Practice and Games (3 recommendations); Quality of Adult Leadership (9 recommendations). Three appendixes provide information on two publications ("Guidelines for Coaching Education: Youth Sports," and "Coaching Certification: A Position Paper") and an address list of representatives of national youth sports governing agencies. Contains 78 references. (AMH)

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OVERVIEW OF YOUTH SPORTS PROGRAMS IN THE UNITED STATES

Vern Seefeldt, Martha Ewing, and Stephan Walk
Youth Sports Institute, Michigan State University
East Lansing, Michigan 48823

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Foreword

The involvement of American children and youth in sports is regarded by many adults as an excellent opportunity for the acquisition of physical fitness, motor skills and socially acceptable values. Unfortunately, the specific role of sport in the developmental process of youth has not been well-documented with scientific evidence.

The widely-held impression that sports hold abundant opportunities for the physical, social and moral development of youth is counterbalanced by the alarming statistic that over 50 percent of those involved in sports have dropped out by age 12. This paradox begs for answers to two questions. First, if the benefits of participation in sports are so apparent and readily available, why are so many potential recipients electing not to acquire them? Second, if the management of youth sports by adults has led to the underachievement of benefits, how can the process by changed?

In the process of describing sports as they exist for most of the children in the United States we have identified the various structures under which sports are offered. This overview focuses on two out of the six categories of organized youth sports; namely, agency-sponsored and interscholastic athletics. Our discussion of the current status and proposed future direction of organized athletics for youth includes seven components of the problem. We have discussed the limiting factors that impinge upon the sports experience, including injuries and the qualifications of the adults who conduct most of the programs. We have also summarized the information that was provided to us by youth who responded to our extensive survey about their experiences in organized sports.

We have limited our discussion to adolescents, with a specific focus on those at-risk. The dramatic nature of developmental changes during adolescence and the potential contribution that athletics can make to these changes are considered in our recommendations for the future of youth sports. Programs that seem to be meeting specific objectives have been identified as a resource for those who seek models of effectiveness. However, the increasing number of adolescents who are growing up in high-risk environments provides a challenge that few organizations seem ready to accept. Many youth-serving groups are at a loss about how to reach such adolescents and how to provide appropriate programs for them. Moreover, the current emphasis on highly competitive sports for young children may be discriminating against those who could benefit most from the potential contributions of sports to self-esteem and self-confidence.

This overview does not suggest that the immersion of American youth in a sports-oriented culture holds the solution to the many problems of adolescents. Conversely, there is ample evidence that the redirection of some sports programs for greater inclusion of underserved populations would greatly enhance the availability of benefits that have been associated with participation in sports. The challenge facing educators, scientists and administrators of sports programs for adolescents is to combine their expertise with a view toward providing programs that concentrate on meeting stated objectives.

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AN OVERVIEW OF YOUTH SPORTS PROGRAMS IN THE UNITED STATES

Introduction

Participation in organized sport has become a common rite of childhood in the United States. Although informal play and structured games have historically been associated with childhood, the provision of competitive sports for children and youth is of relatively recent origin (Berryman, 1988). Since their introduction in the mid-1940's, organized athletics have grown so rapidly that nearly every community offers one or more forms of competitive athletics to its youth and virtually every secondary school and many middle and junior high schools provide interscholastic athletic programs (National Federation of State High School Associations, 1990). The popularity of organized athletics for children and youth has resulted in estimates of participation ranging from 20 million (Michigan Joint Legislative Study on Youth Sports, 1978) to 35 million (Martens, 1986).

The generally accepted platitude that participation in sports is an excellent avenue for the enhancement of a youth's social, psychological, physiological and motor development has been called into question with increasing frequency (Burton, 1988) especially in the light of available evidence that injuries (Micheli & Jenkins, 1990; Clain & Hershman, 1989), psychological stress (Goldman, 1990), and unqualified adult leadership (Smith, Zane, Smoll & Coppol, 1983) are diminishing the potential benefits.

Assessing the contribution of sports to the development of children and youth becomes even more timely in light of the mounting evidence that the quality of life for many young people is declining (Dryfoos, 1990). For example, one of five children, including 46 percent of African American and 40 percent of Hispanic American children will grow up in poverty (Rauch, 1989). The implications of social class, the prevalence of single-parent households and the combination of familial, institutional and social influences have been associated with the category of adolescents "at-risk" (Dryfoos, 1990). However unclear their causal origin, the problems that confront adolescents "at-risk" are characterized by violence, including rape, homicide and suicide; a general disaffection with traditional institutions and authority including truancy and delinquency and unhealthy and irresponsible behavior, manifested in drug abuse and pregnancy at young ages.

At first glance the proposal that sport can be used as an avenue to alleviate the problems of adolescent violence and stress, social alienation and disaffection and unhealthy behavior seems inappropriate. Some would suggest that such overwhelming problems require more direct interventions for their solution. However, there is ample evidence that the involvement of youth in sport has led to the inculcation of responsible social behaviors. Sports have often been cited as the medium that provided the contact between wayward youth and influential individuals. Sport has been credited with providing a sense of affiliation, a feeling of confidence in one's physical abilities, an appreciation of one's personal health and fitness and the development of social bonds with individuals and institutions.

This overview will focus on the needs of adolescents who participate in sports programs and compare these needs with the opportunities that are being provided by the adults who sponsor, implement and administer the programs. Although the questions concerning program outcomes and especially their evidence of effectiveness in meeting the needs of adolescents at-risk is generally lacking, this conspicuous deficiency is in itself an indicator of program emphasis and direction.

This overview concludes with a series of recommendations for change in the way youth sports programs are currently being conducted. These suggestions for change are not intended to depreciate the sporting opportunities that are being offered to America's youth. Rather, they call for an expansion of programs to those who are now underserved and for an elevation of competencies in the adults who supervise, instruct and counsel the young participants.

The Role of Youth Sports in American Culture

Definition of Youth Sports Programs

The term *youth sports* in American culture has been applied to any of the various athletic programs that provide a systematic sequence of practices and contests for children and youth. In reality, these sports experiences differ greatly in competitive level, length of season, cost to competitors, qualifications of coaches and officials and skill levels of the athletes. For purposes of this discussion the numerous sports programs have been divided into six categories; namely, agency-sponsored programs, national youth service organizations, club sports, recreation programs, intramural programs and interscholastic programs. Of these six categories, four are community-based and two are conducted within the schools. The distinguishing characteristics of each program category are described in the following sections.

Agency-Sponsored Youth Sports Programs The term *agency-sponsored* is used to describe local sports programs that are sponsored by service clubs. *Agency-sponsored* distinguishes them from programs that are sponsored by *schools and recreation departments* and from those included under the category of *club sports*. A distinguishing feature of agency-sponsored sports is that one agency within a community often assumes the responsibility for one sport, to the exclusion of all others. In this model numerous sports may be sponsored and administered by various community agencies, resulting in a variety of sponsorships but without a common structure or philosophy among the programs within a community.

Agencies in local communities often affiliate with national sponsors, thereby increasing the competitive opportunities of their participants by exposing them to district, regional or national level competition. Agency-sponsored athletic programs are therefore greatly influenced by the rules and regulations of their respective national governing body, whose regulations are mandated in all competition beyond the intracity level. Examples of local agencies that frequently sponsor sports programs for children and youth are Lions Clubs, Kiwanis Clubs and Police Athletic Leagues. Examples of national programs with which the agency-sponsored programs often affiliate are Little League Baseball, Pop Warner Football, U.S.A. Hockey and the

American Youth Soccer Organization.

National Youth Organizations Agencies within this category sponsor a variety of programs for children and youth, including sports. Typical of organizations in which sporting experiences play an important, but not exclusive role, are Boys and Girls Clubs of America, Girls Incorporated, YWCA, YMCA, Boy Scouts of America, Girl Scouts of the USA, Camp Fire Boys and Girls, and 4-H Clubs. The relative importance of sports within each agency's total set of program offerings varies tremendously from organization to organization, and from community to community within each national structure. For example, sports constitute a significant proportion of the programming in many Boys and Girls Clubs, and Girls Incorporated reports that 99 percent of its local affiliates offer sports programs for girls and young women. The facility-based agencies (including Boys and Girls Clubs, Girls Incorporated, YMCA, and YWCA) have tended to place more emphasis on sports programs than have the troop- or group-based programs (Boy Scouts, Girl Scouts, Camp Fire, and 4-H), although there has been some change in this trend within the past few years. For example, Boy Scouts of America recently developed a new sports-oriented membership category, Varsity Scouts, which currently serves some 59,000 boys ages 13 and over.

What all of these programs tend to share is a commitment to implement their sports programs within the broader context of youth development, and a recognition that sports programs are appealing to and popular with young people. This latter view was confirmed by an alumni survey conducted by Boys Clubs of America during the mid-1980s; respondents to the survey indicated that sports were the most important program component in attracting and retaining them as members of the Boys Club. Other common features of the sports programs offered by national youth organizations include: a hierarchy of activity that generally involves both professional and volunteer leadership; national standards that guide local program implementation and centralized training and technical assistance that support nationally-developed program efforts.

These national sports programs differ considerably in content and approach. Three organizations—the YMCA, Girls Incorporated, and Boys and Girls Clubs of America—received financial support from the 1984 Olympic Torch Relay Event, which enabled them to develop new national sports programs. Girls Incorporated developed the Sporting Chance Program to expand sports opportunities for girls and young women; this multi-part program includes a basic sports skills course, called Steppingstones for girls ages 6-8, and a sports exploration course, Sports Unlimited, for early adolescents. Boys and Girls Clubs of America used its share of the Olympic Torch proceeds to introduce new sports, including team handball and table tennis, to its members. In addition to participating in such national programs, individual local chapters of these organizations may also coordinate leagues and have some affiliation with sports-specific national governing bodies.

Club Sports Program *Club sports* is a term that is commonly reserved for sports programs that conduct year-around practices and competitive opportunities. The sports of swimming, gymnastics and figure skating are frequently included in this category. *Club sports* are distinguished by their year around activities, their fee-for-services structure, the employment of salaried coaches, their use of special facilities and the national structure of their organizations.

Club sports usually have a hierarchy of skill development that begins prior to age six and continues throughout the high school age level. During the high school years competitors often participate in the seasonal interscholastic programs of their specific sport and then join the *club sport* at the termination of the interscholastic season. Local *club sports* such as swimming, wrestling and track and field often affiliate with the American Athletic Union (AAU) during the off-season in an attempt to include year-around training and national competition for their participants. Local interscholastic coaches are also likely to encourage the off-season participation of their athletes in *club sports*, thus providing year-long opportunities for conditioning, training and skill development.

Recreational Programs Although recreational programs sponsor various levels of athletic competition, the term *recreational program* has become synonymous with programs that emphasize fun, physical skill development and social interaction in lieu of a win-at-all-costs philosophy. The pervasive philosophy of the National Recreation and Park Association (NRPA) has influenced recreation programs throughout the

United States to the degree that maximum participation, rather than high levels of competition, is the trademark of the programs that are sponsored by departments of recreation.

Competition in *recreation programs* is usually confined to intracity competition. Participation is available to all who seek it, devoid of tryouts, league standings, all-star contests and post season competition. Although the competitive level in recreation programs ranges widely, a pervasive philosophy that emphasizes maximum participation often places recreation programs in the position of "second-class" programs to the more competitive agency-sponsored programs with national affiliations. Representatives of agency-sponsored programs often recruit the most skillful athletes from recreation programs and enroll them in the more competitive programs.

School-Sponsored Intramural Programs The successful coexistence of intramural (competition of teams within a school) and interscholastic programs (competition of teams between schools) at the junior and senior high school levels is in question, primarily because both programs compete for the same facilities, clients, administrators, finances and prestige within the school population. The ideal hierarchy of program services is to provide a physical education program for all students, to be followed by an intramural program that is designed for all who wish to apply the skills and knowledge learned in physical education in a competitive setting, to be followed by an interscholastic program for students who desire higher levels of competition. In reality, intramural programs at the middle, junior and senior high school levels have frequently been abdicated by educators in favor of the more popular interscholastic programs.

Currently, intramural programs are most successful at the middle and junior high school levels where the competition for resources between them and the interscholastic programs is less intense than at the high school level. The future of intramural programs at the high school level appears bleak, with little prospect for a change in the present situation that results in a major share of the resources being allocated for the interscholastic programs. The outlook for intramural programs at the middle and junior high school levels, too, is pessimistic because of the trend for more interscholastic competition at these levels, thus further eroding the resources that could potentially be directed to intramural programs.

Interscholastic Athletic Programs *Interscholastic athletic competition* includes the organized interschool sports participation of boys and girls at the middle, junior and senior high school levels. Interscholastic athletic competition within the United States is governed by the **National Federation of State High School Associations** (NFSHSA), with headquarters in Kansas City, Missouri. The NFSHSA is comprised of 51 State Associations, representing 20,000 high schools, 500,000 coaches and over 10,000,000 athletes. A primary purpose of the NFSHSA, under their motto of "the other half of education," is to provide universal rules, regulations and guidelines for the conduct of interscholastic sports. Table 1 provides information about the extent of involvement by boys and girls in the nation's interscholastic athletic programs.

Table 1 Participation by Boys and Girls in Interscholastic Athletics During 1991-92 School Year.

		BOYS		GIRLS	
		Number of Schools	Number of Participants	Number of Schools	Number of Participants
ARCHERY		4	188	13	277
BADMINTON		*141	*2,398	*272	*7,037
BASEBALL		13,722	433,684	**52	**541
BASKETBALL		16,469	518,127	15,934	391,612
BOWLING		649	7,886	620	6,588
CANOEING		8	147	11	197
CREW		28	879	28	935
CROSS COUNTRY		10,470	154,119	9,592	110,409
DECATHLON		138	594	17	54
EQUESTRIAN		14	78	21	141
FENCING		44	817	38	432
FIELD HOCKEY		1	40	1,434	49,160
FOOTBALL —	11-man	12,768	890,041	**29	**117
	9-man	305	5,591		**1
	8-man	596	12,905		**2
	6-man	157	4,308		
GOLF		10,025	132,847	**4,277	**42,368
GYMNASTICS		279	3,475	1,604	22,849
HEPTATHLON		2	3	51	186
ICE HOCKEY		925	22,817	**34	**122
JUDO		21	156	5	12
LACROSSE		413	20,883	258	10,544
PENTATHLON				52	83
RIFLERY		135	1,831	79	613
SKIING	(Cross Country)	375	4,413	349	3,540
	(Alpine)	358	5,497	330	3,305
SOCCER		7,025	236,082	4,665	135,302
SOFTBALL	(Fast Pitch)	61	1,070	9,015	221,510
	(Slow Pitch)	12	194	2,093	42,894
SWIMMING & DIVING		4,294	79,998	4,385	93,490
TENNIS		*8,845	*145,374	*8,795	*139,433
TRACK & FIELD	(Indoor)	1,765	41,448	1,600	31,868
	(Outdoor)	14,034	417,451	13,782	327,183
VOLLEYBALL		*1,106	*23,586	*12,095	*293,948
WATER POLO		391	10,273	122	1,260
WEIGHT LIFTING		369	14,719	**114	**2,256
WRESTLING		8,392	229,908	**50	**219
OTHER		329	7,841	26	313

* Includes some co-educational teams

** Includes girls playing on boys' teams and boys playing on girls' teams

Survey conducted by the National Federation of State High School Associations, based on competition at the Interscholastic Level in 1991-92 school year.

Characteristics of Youth Sports Programs

Opportunities for involvement in organized sports begin at ages five and six in most of the team sports such as ice hockey, baseball and soccer and in many of the non-team sports such as gymnastics, figure skating, bowling and swimming. Although data on sport availability by age indicate that young children have historically been included in non-school sports programs (Martens, 1986), the trend during the last two decades has been toward greater accommodation of children four, five and six years of age. The trend for greater availability of instruction in skills and opportunities for competition at younger ages has been accompanied by greater skill levels of the young athletes but it also has concomitant consequences of earlier attrition and injuries due to overuse syndromes. Another trend is to extend the sport season, thus making it more difficult for children to participate in two or more sports, annually.

The assumption underlying the trend toward decreasing the age of eligibility for competition while concomitantly increasing the length of the sports season is that the fundamental elements of complex sport skills must be introduced and perfected prior to adolescence. Consequently, adolescents who have not developed the prerequisite motor skills are not likely to be selected to receive the kind of instruction that is needed for them to be competitive with their age peers. Thus, the prevailing opinion of coaches is that opportunities for successful experiences in athletics during the adolescent years are dependent upon a foundation that must be built from experiences in childhood.

The extent to which selected national governing agencies provide some of the essential ingredients of youth sports programs is shown in Table 2. At first glance the matrix appears to be impressive, but the reader is cautioned that these responses merely indicate that the programs' provisions are available. There is no indication of how well the programs are meeting their objectives in the specific categories. Nor is there evidence that the national sports agencies conduct systematic evaluations to determine how well their clients are being served by the local agencies that affiliate with the national organization. The primary criteria for affiliation with national sports agencies appear to be a willingness to pay the dues for annual membership and an agreement to play according to the rules provided by the national agency.

Table 2 Characteristics of Selected National Youth Sports Programs, by sponsoring organization

Organization	Inclusive Ages	Single Gender & Co-Ed Comp	Competition at National Level	Open to All	Emphasize Fun, Social & Skill Dev.	Spec. Prov. for Children At-Risk	Fee for Play
Amateur Athletic Union	---	yes	yes	yes	yes	no	yes
American Youth Soccer Org.	5-19	yes	yes	yes	yes	no	yes
Dixie Youth Baseball	8 and under -18	yes	no	yes	yes	yes	yes
Hershey Track and Field	---	yes	yes	yes	yes	no	no
Little League Baseball	6-18	yes	yes	yes	yes	no	yes
National Jr. Tennis League	8-18	yes	yes	yes	yes	yes	yes
National Youth Sport Programs	10-16	yes	no	yes	yes	yes	no
Pony Baseball	5-18	yes	yes	yes	yes	no	yes
Pop Warner Football	6-16	yes	yes	yes	yes	no	yes
Soccer Assoc. for Youth	6-18	yes	yes	yes	yes	no	yes
USA Hockey	5-adults	yes	yes	yes	yes	no	yes
United States Volleyball Assoc.	6-adults	yes	yes	yes	yes	no	yes
United States Wrestling Assoc.	8-adults	yes	yes	yes	no	no	yes
Young American Bowling Alliance	8 and under -21	yes	yes	yes	yes	no	yes

Table 2 indicates that most of the programs provided competitive experiences for very young children. Choices of co-educational or single-gender competition were available in all of the programs, as was the opportunity to compete locally, as well as through a competitive structure all the way to the national level. All of the statements of mission, goals and objectives except one emphasized fun, skill development and ethical behavior. None prohibited participation because of an inability to pay enrollment or instructional fees. Conspicuous by their absence were references to winning or indications that intense competition would be required of the participants.

The most notable shortcoming in the list of program characteristics was the lack of special provisions for children-at-risk. Although representatives from each of the organizations indicated that there were no restrictions regarding race, creed or socioeconomic status, only three of fourteen organizations compiled data on the race and socioeconomic status of their participants. These organizations were also the ones that made special provisions to place programs in communities where they were accessible by children-at-risk.

Although nearly all of the national governing agencies charged a fee for memberships and assessed additional fees for tournaments, such fees were modest and should not pose a barrier to participation. However, the sports of gymnastics, tennis, golf, bowling, figure skating and ice hockey required users fees for facilities, instructors and/or equipment that were borne in large part by the participants. The prospect of having to apply for "scholarships" in order to participate in these sports may be a deterrent to youth from the lower socioeconomic strata. In addition, the location of programs that require special facilities is often in suburbs, thus making many of them inaccessible to youth from urban areas.

Trends in Youth Sports Participation

Each of the representatives from the national governing agencies listed on Table 2 reported a general trend of increased participation in their programs during the last five years. These reports of increased participation are surprising in light of the data in Table 3, which indicate that the age group of 5-17 years has shown a steady decline since 1970 in proportion to some other age groups in the United States.

Table 3

Total United States Population in Age Categories, by Percentage

	Percentage			
Age Category	1970	1975	1980	1984
Under 5 years	8.4	7.5	7.2	7.5
5-17 years	25.7	23.6	20.7	19.0
18-24 years	12.1	13.0	13.3	12.2
25-34 years	12.3	14.6	16.5	17.4
65 or over	9.8	10.5	11.3	11.8
Median age, all citizens	27.9	28.7	30.0	31.2

Source: U.S. Department of Commerce, Bureau of the Census, June, 1985.

However, projections from the National Center for Education Statistics (1989) indicate stability in the potential number of 5-13 year old youth sport participants and a slight decline in the potential number of 14-17 year old participants (see Table 4). These data suggest that any increases in youth sports participation are due to changes within a relatively stable pool. Potential explanations are that either the increase is due to (1) a shift from participation in the less competitive recreational programs to the agency-sponsored programs that have national affiliations, (2) greater recruitment and involvement of the younger-aged clients, or (3) program sponsors are providing greater accessibility to youth sports, resulting in the participation of a higher proportion of the potential enrollees. Quite likely each of these possibilities contributed to the greater involvement of youth in agency-sponsored sports programs.

Table 4 Projected School Age Populations for Specific Years, Ages 5, 6, 5-13 and 14-17

Year	5 year olds	6 year olds	5-13 year olds	14-17 year olds
1985	3,548,000	3,428,000	30,000,000	14,865,000
1986	3,605,000	3,555,000	30,351,000	14,797,000
1987	3,651,000	3,612,000	30,823,000	14,467,000
1988	3,668,000	3,657,000	31,374,000	13,970,000
1989	3,604,000	3,674,000	31,793,000	13,476,000
1990	3,736,000	3,609,000	32,393,000	13,237,000
1991	3,719,000	3,741,000	32,827,000	13,334,000
1992	3,724,000	3,724,000	33,243,000	13,538,000
1993	3,734,000	3,729,000	33,549,000	13,774,000
1994	3,745,000	3,739,000	33,738,000	14,187,000
1995	3,730,000	3,750,000	33,864,000	14,510,000

Source: National Center for Education Statistics, U.S. Department of Education, December, 1989.

Reports on participation rates by the National Federation of State High School Associations (Seefeldt & Haubenstricker, 1988) (see Table 5) reflect the census data in Table 4 for sports participation by boys, in which only soccer recorded an increase in participants from 1975-76 to 1985-86. However, girls increased their rates of participation in four of the eight sports in which comparisons were available. These increases are probably due to a combined shift in interest of girls, for whom interscholastic sports were a relatively new experience in 1975-76, and to the growth of specific agency-sponsored sports that influenced their interscholastic participation.

Table 5

Longitudinal Record of Participation in the Top 10 Interscholastic Sports for Boys and Girls

	Boys		Girls	
	1975-76	1991-92	1975-76	1991-92
Football	1,077,599	912,845	——	——
Basketball	688,410	518,122	387,507	391,612
Track/field	644,813	458,899	395,271	359,051
Baseball/softball	399,900	433,684	133,458	264,404
Wrestling	334,107	229,908	——	——
Cross-country	204,087	154,119	30,899	110,409
Tennis	143,970	145,374	112,166	139,433
Golf	154,457	132,847	32,190	42,368
Swimming	125,234	79,998	85,013	93,490
Soccer	112,743	236,0828	——	135,302
Volleyball	——	——	245,032	293,948
Field hockey	——	——	——	49,160
Gymnastics	——	3,475	79,461	22,849
Skiing	——	5,497	5,367	3,305
Total	4,109,021	3,310,855	1,645,039	1,905,331

Summary and Conclusions

Youth sports programs in the United States were divided into six categories, according to common characteristics. The six categories are agency-sponsored, national youth service organizations, club sports, recreational programs, school sponsored intramural programs and interscholastic programs. By far the largest number of youth participants are involved in the non-school programs. In general, participation in the non-school sports for both genders has increased during the last two decades while the participation of boys in interscholastic programs has decreased. Girls' participation in interscholastic sports increased in four of eight sports for which comparisons were possible.

Role of Athletic Competition in Youth Development

The popular belief among many people in our society is that competition, especially athletic competition, will enhance the development of our youth. Numerous trade publications have suggested that participation in sport will "develop character" which is generally understood to include teaching children the values of sportsmanship, cooperation, self-discipline and accepting/playing according to rules. Others have suggested that competition will teach athletes how to cope with both success and failure or that they will learn about right and wrong (i.e., the value of playing by the rules) through playing on a sport team. However, sport sociologists (e.g., Coakley, 1990; Kleiber & Roberts, 1983) have intimated that while athletic participation may enhance the development of these concepts for youth sport participants, it does not occur by virtue of being a member of a team. The key to developing a young person's moral values lies in the quality of the adult leadership, the organizational philosophy and the parents' reinforcement of these values at home.

Level and Intensity of Competition

For youth 10 to 14 years of age, most sport opportunities occur during the summer months or after school and on Saturdays. Parents enroll their children for participation in sport programs, teams are created and 2-6 practice sessions are scheduled before the first game. Seasons may last 8-12 weeks, with teams playing 4 to 16 games. In many of the sport programs for 10 to 14 year old youth, there is a play-off system to determine the best team. In most communities these non-school sports opportunities are offered through the community recreation program and in order to participate a fee must be paid. In addition, most of the coaches in these programs are volunteers, usually parents, who are interested in their child having an opportunity to participate in a sport. This pattern of parental involvement has specific implications for adolescents "at-risk" who frequently do not have parents who serve as advocates for the adolescent's initial involvement in the sport or as a supporter and contributor during the conduct of the program. The objective of these programs is advertised as being instructional, although many of the coaches have no experience in teaching sport skills, organizing a group of youth for effective instruction, or analyzing complex motor skill patterns. The intensity of the program is directly related to the intensity of the coach/parent and the coaches' need to feel successful as measured by their win/loss record. Thus, the opportunity to learn is variant, depending on the parent/coach's knowledge of the sport and his/her past experiences in organized sport.

The sport experiences offered within the junior and senior high school are generally more intense, instructional, competitive, and visible than those in the community programs. Interscholastic programs have many more rules and regulations that must be followed with respect to number of practices and games, age and academic success of the participants, and the payment of coaches. Practices are held daily and perhaps more than once a day in the early portion of the season, plus the length of the season may be from 3 to 4 months. Post-season competition is a part of the sport opportunity for the more successful teams.

Results of the interscholastic contests are published and discussed in the local paper and by patrons in the business community. This increased visibility sends a clear message to male youth in particular that athletic success is highly valued. In addition, athletes learn quickly that associated with a good performance is the expectation of the same or better performance in the next game. Community patrons are seldom rational consumers of sport. Discussion centers on outcomes (who won) and statistics. The impression of many adults is, "If it cannot be quantified, it is not valuable". Rarely do we discuss the skill improvement or consistency of performance of individual athletes, their educational accomplishments, or the improved interpersonal relations of athletes on the team.

There are many benefits to be derived from the more structured approach of interscholastic sport programs as opposed to non-school programs. Perhaps the most important benefit is to the student-athlete who is likely to have a better qualified coach for her/his team. Until recently most coaches were also teachers in the school system and many were physical educators who were adept at teaching and analyzing sport skills. Unfortunately, the most recent trend in coaching at the junior and senior high school level is for school districts to hire coaches whose vocation is outside the educational arena. This trend has occurred for several reasons. First, the faculty in the schools is getting older and many no longer wish to coach. Second, the pressure placed on coaches to be successful (i.e., win) has discouraged many coaches from continuing. Third, the admission of girls to interscholastic programs has increased the need for coaches and fourth, many schools are offering more sports now than in previous decades. These reasons have forced communities to look for coaches outside of education. These non-faculty coaches may possess only a high school education and limited knowledge of the sport they coach. Thus, today's high school coaches have characteristics similar to the community sport coaches described earlier. These characteristics threaten the potential benefits to be derived from participation in interscholastic sports.

A second benefit to be derived from sport experiences is the instructional model that is utilized from junior through senior high school. In many of the more successful programs there is a sequential instructional program for athletes from the junior high to the senior high school varsity levels. In some instances this program includes summer camps for children in the elementary programs within the school district to introduce the basic skills as well as to introduce students to the drills and terminology used by the coaches in the athletic program. This approach ensures that attention is paid to the systematic instruction of children who aspire to become high school athletes.

The interscholastic model also has its drawbacks. First, the junior and senior high schools are able to serve only a limited number of youth. In many instances schools are limited by financial constraints. Coaches and facilities are limited to one team per sport per grade level in the junior high school and generally two teams of freshmen, junior varsity and varsity at the senior high school. This system forces many adolescents to drop out or to be eliminated from teams. This may be particularly devastating to late maturing youth who are not able to compete successfully against others who are bigger and stronger during their early adolescent years.

Most recently, the nationwide reduction of resources for primary and secondary schools has created special problems for school districts in low income areas. Such districts are more likely to restrict or eliminate "extra-curricular" activities, thereby forcing the students who wish to participate in sports to seek avenues where "pay-for-play" is the only opportunity available to them.

In addition to the community/agency and school sponsored sport programs, sport clubs are available for youth whose families have greater financial resources. These clubs are conducted on a " for profit" basis and are generally specialized in their sport offerings. For example, sport-specific clubs exist for gymnastics, swimming, track, martial arts, tennis and ice skating. These clubs offer intense training with specialized coaches. The regimen of training is often very intense, requiring children to practice 12 to 30 hours per week depending on their age and competitive ability. This type of sport opportunity is a costly endeavor, which may require families to move, live apart or send children away to live with an unknown family. The social life of these children is often tied to the other children in the club, with little time left to engage in the so-called normal activities of other children their age. Sports clubs emphasize success in performance, with reduced emphasis on the athlete's specific social, academic, and personal needs. Sports clubs generally demand a greater involvement than other forms of athletics on their enrollees to the point where the "club" becomes a way of life for the athlete and his/her family.

Sport can be packaged in many ways for children with varying degrees of intensity. Is one of these approaches more effective in "building character" of the youth participants? It is not clear that any of these approaches meet the goal of teaching children the values of sportsmanship, cooperation, self-discipline, or citizenship. However, this is not to say that there is little value to participating in sport and engaging in competition. Indeed, the evidence suggests that there is much to be gained from competition and/or participation in sport. These benefits are discussed in the next section.

Beneficial Effects of Competition

One of the nation's concerns since the 1950's has been the fitness level of the youth of this country. As more and more attractive sedentary activities are developed, the issue will continue to grow. Therefore, a major role of sport participation is to provide youth with attractive, alternative activities that will enhance the fitness level and, consequently, the self-esteem of the participant. A major problem for parents and program administrators is finding a way to provide sport opportunities to all youth in such a way that they will want to continue their participation and concomitantly, its potential health benefits as they grow older and are faced with more potentially debilitating choices.

Learning Physical Skills One of the major benefits of participating in youth sports is the learning of physical skills that will allow continued participation in a sport or that will provide the foundation for learning other sports. Experts agree that the time to teach sport and/or movement skills is prior to the time when children are asked to perform in front of a highly evaluative audience where the outcome of the event is the only criterion of success. Specifically, the best time for children to learn movement skills is during the preschool years. Sports skills, which are built upon a base of movement skills, are most efficiently learned during the elementary school years. Unfortunately, many youth are not introduced to sports until they enter junior high school.

During the junior high school years there are reduced opportunities, as mentioned previously, to learn skills, plus there is a public competitive display of abilities. The additional self-consciousness of early adolescence can be extremely upsetting to the young athlete. If an adolescent is skillful or perceives him/herself to be skillful, then the competitive experience will be an enjoyable one. For adolescents who are uncertain of their abilities, the addition of competition can be stressful and threatening to their self-esteem.

Seefeldt (1987) suggested that there are many benefits associated with learning specific sport skills. As one gains skill in a specific sport, the child often experiences an enhancement of self-esteem, an increase in self-confidence and a desire to continue at the task. In some sports youth may also learn about the value of team play, being physically fit and setting and achieving goals. If the child is encouraged to make decisions about the degree of sport involvement and is not coerced to participate by a parent, these benefits are more likely to be realized. The attributes of self-esteem and confidence are critical for teenagers to acquire if they are to become confident and achieving adults. This is not to suggest that these characteristics can be learned only through involvement in sport.

Appreciation of Fitness Youth who participate in sport programs should derive an appreciation of mental and physical fitness. Youth 10 to 18 years of age frequently identify some aspect of fitness (e.g., " to get exercise," "to stay in shape") as a main reason for their sport participation (Ewing & Seefeldt, 1989). The contributions of specific sports to the various components of fitness are presented in Table 6. The fitness benefits derived from sports are variable. Many sports contribute to anaerobic capacity and muscular endurance. Very few sports contribute to "high" total body coordination and flexibility. Although youth may not refer to fitness as exercise physiologists do, they nonetheless experience some satisfaction from increased cardiorespiratory capacity, greater flexibility, stronger muscles and less body fat. In addition to these health-related benefits, youth sport participants gain in motor fitness. Specifically, motor fitness includes muscular strength, muscular endurance, power, agility, balance, improved reaction and movement time, and improved anaerobic capacity (Seefeldt, 1987). While these components of motor fitness are partially determined by genetic endowment, gender and chronological age, sport participation should provide each child an opportunity to develop her/his capacity in each of these components. For youth to derive these benefits from sport participation, they must be provided the opportunities to engage in activities that contribute to the development of motor fitness.

Sense of belonging Another potential benefit of sport participation is the sense of belonging to a team or group. This sense of belonging allows youth to make new friends and to learn to appreciate youth of different backgrounds. While simply being a member of a team is not sufficient to ensure that a sense of belonging occurs, coaches can do much to facilitate the positive interaction among youth of different backgrounds and ability levels.

Many youth report that "to play as part of a team" and "to make new friends" are reasons why they participate in organized sports. Coaches must be aware that youth who have low skill level, have low self-esteem, or who are low in social skills are not likely to derive these benefits from sport without intervention, instruction, and reinforcement.

Table 6 Contributions of Specific Sports to the Components of Physical Fitness

	COMPONENTS OF FITNESS					
Sport	**Aerobic Capacity**	**Anaerobic Capacity**	**Muscular Strength**	**Muscular Endurance**	**Total Body Coordination**	**Flexibility**
Baseball	Low	High	High	Low	Moderate	Moderate
Basketball	High	High	Moderate	High	Moderate	Moderate
Diving	Low	High	High	Moderate	High	Moderate
Fencing	Low	High	Moderate	Low	Moderate	High
Field Hockey	High	High	Moderate	Moderate	Moderate	Moderate
Football	Low	High	High	Moderate	Moderate	Moderate
Golf	Low	High	High	Low	Moderate	Moderate
Gymnastics	Moderate	High	High	High	High	High
Ice Hockey	High	High	High	High	Moderate	Moderate
Lacrosse	High	High	Moderate	High	Moderate	Moderate
Rowing	High	Moderate	Moderate	High	Moderate	Moderate
Skiing • Cross-country	High	Low	Moderate	High	Moderate	Moderate
Soccer	High	Moderate	Moderate	High	Moderate	Moderate
Swimming						
• Endurance	High	Low	Moderate	High	Moderate	Moderate
• Sprints	Low	High	High	Low	Moderate	Moderate
Tennis	Moderate	High	Moderate	High	Moderate	Moderate
Track & Field						
• Sprints	Low	High	High	Low	Moderate	Moderate
• Field Events	Low	High	High	Low	Moderate	Moderate
• Distance	High	Low	Low	High	Moderate	Moderate
Volleyball	Moderate	High	High	Moderate	Moderate	Moderate
Wrestling	Moderate	High	High	Moderate	Moderate	Moderate

From:
Fox and Mathews, 1974
Mathews and Fox, 1976
Sharkey, 1986

*Estimates are based on values obtained from assessing the performance requirements of adults.

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Enhancing social development Many proponents of youth sport programs have argued that participation in sport builds "character" and is preparation for adult life in American society. These proponents cite learning to play by rules, sportsmanship, and respect for opponents and authority as derivatives of the sport experience (Coakley, 1990). Indeed, Former President Gerald Ford is quoted as saying "Outside of a national character and an educated society, there are few things more important to society's growth and well-being than competitive athletics. If it is a cliché to say athletics builds character as well as muscle, then I subscribe to the cliché" (cited in Coakley, 1990). These notions are given credence by the propensity of business and political leaders to use sports as a model for improving business practices (e.g., Keidel, 1985) characterizing institutional loyalty (e.g., being a "team player") and arguing for fair economic competition (e.g., the "level playing field" of international trade). Further, sport seems to serve as a modern day civic religion, in that local teams provide a point of community identity and are familiar contexts for 'small talk'."

Unfortunately, very little research has been generated to support the supposition that sport builds character. In fact, there is little evidence to suggest a cause-effect relationship between sport participation and either personality or behavioral changes which could be defined as "character." Ogilvie and Tutko (1971) argue that the qualities of character associated with athletes are established prior to a youth's involvement in sport. Ogilvie and Tutko further suggest that those athletes who have developed the understanding of fair play, good sportsmanship and cooperation, rather than competition, may actually be excluded from sport.

As in the business and political worlds, the character-building values considered to be beneficial to youth are possible in sport only to the extent that adult leaders and peers work to bring them about. Specifically, coaches must be good models of sportsmanship, must abide by the rules and not brag of how they got around a rule, and must respect the officials regardless of how they saw a play. Parents must have appropriate expectations of their child and reinforce the demonstrations of valued behaviors. Peers on a team must be encouraged to reward a less-skilled player when she/he accomplishes a skill, or to thank a player who has been encouraging the team during a game. In other words, social development does not occur in a vacuum. Children must practice and receive proper reinforcement for playing by the rules, respecting authority and the opponents, and for being a good team member. The moral implications of these points will be discussed in the section on moral development.

Acquiring sport skills for leisure Perhaps one of the most beneficial aspects of sport participation is the learning of sport skills for leisure. Children learn many of the basic components of sport skills through participation in youth sport programs. For example, kinesthetic awareness is enhanced through participation in sports. This awareness is a foundation for learning other sport skills. In addition, youth can learn eye-hand coordination from many sports in which objects are projected or intercepted (i.e., softball, ice hockey, badminton). Thus, the child who grew up playing Little League baseball has learned how to move an implement (bat) to intercept an object (ball) that is moving. Thus, some components of eye-hand coordination that were learned in baseball may be used to learn golf simply by changing the swing from the horizontal plane to the vertical plane and contacting a stationary ball. The key to deriving the benefit of skill transfer, however, is to keep youth in sport programs long enough for these basic skills to develop and to have them experience a variety of sports in which to use their repertoire of movement skills.

For many youth in small communities or in lower socioeconomic groups, the opportunities to learn sport skills may be limited to a few activities due to a lack of community programs or facilities. Youth who wait until the teenage years to learn sport skills are often discouraged by more experienced and skilled teammates or by unsympathetic coaches who do not want to take the time to teach unskilled players. Also, as youth move into interscholastic programs, they are often given 2 to 3 weeks of instruction and immediately thrust into competition, which is conducted in a public arena under the watchful eyes of many friends, family members and teachers. Perceived failure in this arena is threatening to a teenager's self-esteem and may lead to a decision to withdraw from the team rather than cope with the threat.

Potential Detrimental Effects of Competition

Moral Development Sportsmanship is one of the positive moral values often associated with participation in competitive sport. The issue of sportsmanship is mired in the ambiguity of how to define the term. Is sportsmanship defined by playing within the rules, not arguing with officials, and shaking hands with the opponent at the end of the game, win or lose? Kroll (1975) suggested that sportsmanship goes beyond these behaviors and should be conceived as involving a strategy that sacrifices success in favor of a decision guided by moral criteria. Thus, the coach who asks a pitcher to throw inside to a batter, or to go into a game with the intent of "taking out" an opponent, may place the athlete in a moral dilemma. This is true, of course, if the athlete's existing moral values include being responsible for the safety of others, whether teammate or opponent. If sport participation requires youth to continually compromise basic moral principles, we may expect that sportsmanship is being placed secondary to competitive success.

Bredemeier (1984) suggested that cultural values in the United States tend to encourage a set of stereotypically male virtues, such as independence and competitiveness, in contrast to such stereotypically female virtues as sociability and cooperation. Because nearly all contemporary youth sports programs have been modeled on those historically organized by and for males (Bryan, 1977), girls in sport may find themselves in a double-bind. Specifically, they may be stigmatized as "noncompetitive" if they value interpersonal harmony over individual achievement, or they may be criticized for lacking "femininity" if they display the success-oriented, stereotypically male virtues (Bredemeier, 1984).

The development of these gender-specific virtues occurs early in life as children are socialized into appropriate gender roles as defined by their specific culture. For example, research grounded in the theory of professionalization asserts that, with age and experience, a progressive change in attitudes toward sport occurs. In a "play orientation," which is characteristic of children who have not yet extensively participated in sport, fairness is valued over skill and skill is more valued than success. In a "professional orientation" the value of fairness becomes subordinated to competence and winning. The professional orientation has been found to be more pronounced with males than females at all levels of sport involvement (Loy, 1975; Sage, 1980).

The literature on professionalization in sport also indicates that the interaction of gender and athletic participation provides a configuration of value orientations that sometimes runs counter to cultural stereotypes. Bredemeier (1980) investigated the expressive and instrumental value preferences of sport participants relative to sport and everyday life. She found that Caucasian males at all levels of sport involvement preferred instrumental values for both sport and everyday life. Females, on the other hand, varied in their preferred values depending upon the level of involvement. Professional female athletes preferred instrumental over expressive values both in everyday life and in sport; intercollegiate female sport participants expressed a mixed orientation, valuing an instrumental orientation in sport and an expressive orientation in everyday life; female recreational participants valued the expressive orientation in both sport and everyday life. The movement toward an instrumental orientation by women in more elite competitive arenas runs counter to general socialization patterns. Hence, sport may have a powerful influence on value orientations which may be perceived as both beneficial and detrimental depending upon the gender and age of the sport participant.

Achievement of Excellence Popular beliefs tend to connect the achievement of excellence with competition. Forgotten in this belief is the fact that success requires only that you exceed the efforts of your opponent(s). In sport, one does not always need to give more than a mediocre performance to win. This is particularly true in youth sports, where skill levels of the competitors may be tremendously variant. This variance is seen in many agency sponsored programs, where teams are constructed on the basis of age groupings. In addition, maturational differences are seldom considered in the construction of teams. These maturational differences may be most notable at the junior high school, in which mature males and females are often competing with physically immature males and females. Under these conditions, success is frequently determined by the number of physically mature athletes on a team and not the athletes' skill level.

It is also the case in sport that competitors may give their best performance and lose. The message in American society is quite clear: a best performance is only significant if it results in a win. Indeed, following a loss, many coaches believe that athletes could have done more even though the evidence suggests otherwise. This overemphasis on winning, this singular definition of success, may cause potentially good athletes to withdraw from sport because even their best performance does not measure up to an adult standard of excellence. Having done one's best and still being viewed as a failure will lead many athletes to conclude that they are not very good in sport and they therefore will look to other arenas to satisfy their need for achievement. Competition generally encourages those who already excel to develop their skills even further. For those who are unsuccessful in attaining recognition and/or rewards, competition often creates frustration and disappointment and eventual withdrawal from participation.

In this vein, another potentially detrimental aspect of competition is the emphasis on specialization and elitism. With respect to specialization, Coakley (1990) suggested that in most industrialized societies, competitive success requires athletes to specialize and focus their attention on a single sport. This view of specialization may lead to excellence in a single activity or position, but it prevents the development of skills in a variety of activities. Thus, is excellence defined as being the best in one specialized event or is it being good in a variety of events? Competition promotes the former definition of excellence in sport. For youth, the problem with this definition is that they are often forced to specialize in a single sport or one position in the hope of achieving competitive success. Those few who do gain competitive success will experience an increase in attention and respect from adults and peers, and, in a few cases, financial rewards in the form of a college scholarship or a professional career in a sport. The majority of youth, however, must cope with the consequences of specialization without the benefits of attention and/or rewards.

In terms of the academic achievement arena, overemphasis on sport participation leads some students to neglect academic work. While it is possible that sport participation may instill a sense of academic responsibility, students with strong commitments to sport participation may lose sight of academic goals. Studies have consistently shown that being a good athlete outranks being a good student within prestige hierarchies in American high schools, and particularly with males. Further, as

Eitzen and Sage (1989) have summarized, being studious and a non-athlete have been shown to be among the lowest ranked characteristics within these hierarchies. Hence, it seems that high schools often create pressures for achievement energies to be devoted to athletic activities which enhance the institution as a whole, rather than academic activities which enhance the individual student. This creates an environment in which athletes forego studies in favor of the more institutionally rewarded endeavors of athletic performance. Given the fact that high schools produce more ex-athletes than college scholarship athletes, athletic skills which are acquired at the expense of academic skills leave the ex-athlete without negotiable credentials for career development.

Competition and Motivation The impact of competition on a person's level of motivation is dependent on several factors. First, competitive orientations and competitive behaviors are learned. One's culture will heavily influence the degree to which competitive behavior is rewarded and thus valued. In addition to culture, socioeconomic status can influence the value placed on competitive behaviors. For example, Pepitone (1980) found that competitive behavior is less characteristic of people who live in rural areas and among people in low-income groups. Quality of life among these groups of people is often linked to cooperative relationships rather than on being competitive.

Gender differences have been reported in studies of behavior in competitive situations (e.g., Duda, 1986; Weinberg, 1979). Gender differences are conceived as being tied to patterns of social experience, rather than to innate characteristics of men and women. Indeed, both men and women who are low in self-confidence and who have low expectations of success report lower levels of motivation when faced with competition.

Moreover, there is nothing to be gained from competing for a reward when there is little chance of succeeding or where the only chance of success is due to luck. The tendency to avoid competition may be particularly relevant to teenage males, whose masculine identity is often tied to an athletic image (Olrich, 1990). This is particularly important in light of studies which have consistently found that high school males rank achievement in athletics higher than academic excellence as a measure of popularity

(Chandler & Goldberg, 1990). Coaches are well aware of these orientations and will often work to restructure attitudes toward competition during a losing season. During this difficult time, coaches will frequently attempt to focus the athlete's attention on the achievement of performance goals, rather than on the outcome of competition (i.e., winning). Winning is perceived as ultimately possible if one tries harder. In this way, athletes can be motivated to continue practicing and giving good efforts, which are valued and will result in positive feedback, even though winning is doubtful.

Perhaps the biggest deterrent to the positive influence of competition on motivation is the complexity of the activity. Athletes in junior high school and early in senior high school are often asked to compete in activities in which they are still learning the skills. For example, if a youth who is learning to dribble a basketball (a complex, interactive task) is thrust into competition, where the object of the opponent is to take the ball away, competition can decrease motivation. If, however, the youth is asked to perform a simple, more repetitive activity, e.g., swimming or running, competition can increase motivation. Once the task has been learned, the initial challenge is gone as well as the desire to engage in the repetitive task. For complex tasks which are not well-learned, competition may decrease motivation by publicly revealing the lack of understanding and skill that a person has. This impacts self-esteem negatively and may cause individuals to avoid trying very hard (saving face) or cause the individual to drop out. Only for those individuals who are skilled or who are involved in repetitive activity can competition increase motivation. The challenge of the competition or the expectation of a reward may cause individuals to work harder or to exclude working in other achievement arenas in order to maximize the rewards in sport.

Age Appropriate Guidelines

Very little attention has been given to the establishment of age-appropriate guidelines by agency or scholastic sport governing groups. A singular model of sport organization has been adopted. This model favors the skilled performer in terms of rewards and associated beneficial effects. However, if sport governing groups are serious about how to enhance the benefits of competition and reduce the detrimental effects of competition, attention must be given to establishing guidelines that are based on general knowledge about physical and psychosocial development as well as specific knowledge about the development of sport skills.

Levels of competition Because of the differential skill levels of youth and the importance of maximizing self-esteem of youth, particularly teenagers, sport organizations should provide differential levels of competition. For example, in the junior high school programs, opportunities should be provided for youth to learn sports skills on an instructional level, without the pressure to perform publicly. This could be followed by an intermediate level, where instruction is combined with controlled competitive opportunities. In both of these levels emphasis is on instruction and maximizing self-confidence and self-esteem. Finally, the competitive level could be implemented in which those individuals with skill and understanding of the sport could be challenged through competition. This tiering of competitive experiences is very similar to community recreation programs offered for adults.

Evaluation of Coaches If the value placed on competition is to be realized, school and agency organizations must find ways to evaluate the effectiveness of coaches other than via win/loss records. Smoll and Smith (1991) reported that one of the ways to enhance the self-esteem of youth ages 9-12 in a sport setting was for coaches to use a positive approach to coaching. This approach emphasizes instruction plus encouragement following an error, and complimenting the correct behaviors that athletes demonstrate. Their research has shown that this positive approach is most effective in keeping youth involved in sport. Specifically, they reported that 95% of the youth who were coached via the positive approach returned the following year, compared to 75% of those youth who played for untrained coaches. Youth with low self-esteem who played for coaches trained to use the positive approach reported greater increases in self-esteem at the end of the season than low self-esteem youth who played for untrained coaches. Thus, youth sport coaches should be evaluated on the improvement in skills, knowledge and personal/social development of their athletes as well as the number of youth who return the following year. This de-emphasis on the final score would provide coaches the opportunity to teach sport skills that would enhance the self-esteem of the youth rather than focusing on only the highly skilled athletes.

Evaluation of Youth Based on Their Own Past Performance If youth are to derive the benefits of sport participation, they must see that their performance is improving regardless of the team record. Defining success as bettering one's past performance will motivate youth to persist in sport through the years when physical and cognitive skills are developing.

These guidelines would be appropriate for youth through the junior high school and early high school years during which the development of self-identity and self-esteem is so variant. The varsity level in high school, by which time youth have learned the sport skills, may be the earliest time to focus primarily on competition.

Summary and Conclusions

Proponents of youth sport have argued that participation on a sport team enhances the comprehensive development of our youth. Currently, sport programs are available for teenagers on a variety of levels. Agency-sponsored, recreational, club and school-sponsored sport teams provide teenagers the opportunity to be involved in some sport on a year-around basis. The greatest distinctions between agency-sponsored and school-sponsored programs are the time commitment required of youth and the intensity of competition.

The level of intensity experienced by the youth sport participant is generally greater in the school sponsored sport programs due to the greater visibility given to the sports programs by the media and community patrons. In general, youth who participate in school-sponsored programs benefit from more qualified coaches who have implemented a systematic instructional program. Interscholastic coaches are frequently also educators within the school district and are able to see a child develop academically and socially, as well as athletically.

The potential benefits of competition are numerous. Youth learn physical skills and are given the opportunity to test their skill against others. Associated with improving one's skillfulness, youth may gain self-confidence, increased self-esteem, improved fitness, a sense of belonging, and the self-satisfaction of achieving goals.

These attributes are gained only if the sport structure fosters a positive learning environment.

Youth involved in competitive sports may also experience detrimental effects. If winning is all that is rewarded, the potential benefits become scarce, while detrimental effects multiply for the members of the losing team and those members of the winning team who are not given a chance to play. Sportsmanship and fair play may also be discarded in favor of winning. This aspect of competition often runs counter to the socialization of females, which creates a double-bind for female athletes. The pursuit of excellence within sport is also a potential detriment when winning is the singular criterion for success and athletes are asked to specialize too early. Finally, motivation may be impacted negatively by athletes who view a losing performance as an indication of low ability.

In order to maximize the benefits of competition, age-appropriate guidelines must be developed. Guidelines should provide for varying levels of competition, systematic evaluation of coaches and for teaching coaches and youth to evaluate their performance relative to their last performance, not just competitive outcome.

Education of Youth Sport Coaches

National Guidelines for Coaches' Education

Agency-Sponsored and Recreational Programs The vast majority of children and youth who participate in agency-sponsored and recreational sports programs in the United States are coached by one or more of the participants' parents. These parents as volunteer coaches, estimated to number two and one-half million, generally have no special preparation as coaches other than possibly their own previous experience as an athlete (Michigan Joint Legislative Study on Youth Sports, 1978). The dilemma of having interested but unqualified adults providing a major share of the leadership in children's sporting experiences was addressed by the **Youth Sports Coalition** of the **National Association for Sport and Physical Education** (1986). Their publication, **Guidelines for Coaching Education: Youth Sports**, describes prerequisite competencies that should be acquired by every youth sports coach (see Appendix A). These competencies are listed under the following categories:

A. Medical-Legal Aspects of Coaching
B. Training and Conditioning of Young Athletes
C. Psychological Aspects of Coaching
D. Growth, Development and Learning of Young Athletes
E. Techniques of Coaching

Upon publication, these competencies were readily endorsed by thirty-three national sports governing agencies and institutes. However, compliance with these guidelines is optional. At this time there is no evidence that any of the national sports governing agencies mandate that their coaches meet the competencies suggested by the Youth Sports Coalition.

Interscholastic Programs Coaching interscholastic sports in the United States has undergone significant changes since the 1950's when coaches were required to be employed as teachers in the school system in which they coached. At that time most coaches were physical education teachers or possessed academic minors in coaching. Today only thirteen states require their coaches to meet minimum standards

(Martens, 1988) and none require their coaches to meet the standards proposed by the **Joint Coaching Committee of the National Association for Sport and Physical Education** and the **National Association for Girls and Women in Sport** (see Appendix B). Thus, the problems that accompany the employment of unqualified coaches are equally acute in interscholastic and agency-sponsored sports programs. Attempts to solve the problems posed by unqualified coaches are addressed in the next section.

National Programs for Coaches' Education

Despite the compelling need for coaches' education in school and non-school sports programs, only four programs of national prominence exist within the United States. They are: (1) American Coaching Effectiveness Program (ACEP); (2) Program for Athletic Coaches' Education (PACE); (3) National Youth Sports Coaches' Association (NYSCA); and (4) National Federation of Interscholastic Coaches Education Program (NFICEP). Programs that have been developed and implemented by individual sports governing agencies are not included in this number. Numerous independent agencies and many of the national sports governing agencies have subscribed to one of the four programs mentioned above or have used one of these programs as a model to develop their own coaching education programs. Characteristics of the four most prominent programs are as follows:

American Coaching Effectiveness Program (ACEP): ACEP was founded in 1976 to provide coaches with practical information in the sport sciences, coaching philosophy, sport management and first aid. The first course materials were produced in 1981. The ACEP curriculum, based on the motto of "Athletes first, Winning second," was developed for coaches of all levels of experience. The curriculum is organized into three levels as follows:

> **Volunteer Level:** The Volunteer Level is composed of two courses: The *Rookie Coaches Course* teaches basic coaching principles and sport-specific skills and strategies; the *Coaching Young Athletes course* provides more comprehensive instruction in coaching principles. **Leader Level:** The Leader Level is especially for school coaches who have completed the Volunteer Level

and want to learn more, and for those with coaching experience but no formal education as a coach. The Leader Level has three courses. **Master Level:** The Master Level is for coaches who have completed the Leader Level, for college students majoring or minoring in coaching, and for any coaches seeking advanced education. The Master Level offers 13 courses.

Program For Athletic Coaches' Education (PACE): The Institute for the Study of Youth Sports at Michigan State University was established in 1978, with three mandates from the Michigan Legislature: (1) to conduct research on the potential beneficial and detrimental effects of competitive sports on children and youth; (2) to develop educational materials for coaches, administrators, athletes and parents; and (3) to conduct educational programs for coaches. To date personnel from the YSI have produced over 100 publications, conducted over 1,300 Level I and II workshops for coaches and presented educational programs for over 65,000 of Michigan's coaches. The workshops are in three, six or nine hour formats, with certification available from the Institute for the Study of Youth Sports and the Michigan Recreation and Park Association after successful completion of the nine hour program. A certification program for instructors termed **Educational Program for Instructor's Certification (EPIC)** is available to individuals who wish to conduct Level I workshops.

In 1987, the YSI joined forces with the Michigan High School Athletic Association to produce a comprehensive educational program for interscholastic coaches entitled **Program of Athletic Coaches' Education** (PACE). The PACE program has been adopted by six states and two national governing bodies of the United States Olympic Committee. PACE was written to conform to the coaching certification competencies developed by NASPE and NAGWS. The educational package includes an **Instructor's Guide**, a **Coaches Guide**, video vignettes of each module, a course syllabus and a prototype examination. Certification as a PACE coach is available upon successful completion of the 12-hour course. Certification for PACE instructors is available upon completion of a 30-hour course.

National Youth Sports Coaches' Association (NYSCA): The NYSCA was formed in 1981 with headquarters in West Palm Beach, Florida. Its national network of programs include 1600 community recreation agencies. NYSCA provides a certification program for beginning level coaches upon attendance of a six-hour instructional program. Second and third year re-certification programs of three hours each are required for continued membership in NYSCA. In addition, the NYSCA operates a National Youth Sports Research and Development Center at Northern Kentucky University and works in conjunction with the National Parent Teachers' Association to provide education about desirable youth sports programs to parents. In conjunction with the U.S. Office of Substance Abuse Prevention and the Drug Enforcement Administration, NYSCA provides education programs on drug and alcohol abuse to sports agencies.

National Federation Interscholastic Coaches Education Program (NFICEP): NFICEP is a special edition of the ACEP Leader Level curriculum approved by the National Federation of State High School Associations in 1990. NFICEP certification is acquired by successful completion of three courses: an eight hour course in sports science, a four hour course in first aid and a 4-8 hour course in sport techniques and tactics.

Summary and Conclusions

Competencies for coaches of athletes who participate at the interscholastic and agency-sponsored levels of competition have been identified, but there is little evidence that these competencies are being enforced at any level of competition. Recent provisions of comprehensive educational programs for coaches has made the pre and in-service of coaches accessible to those who administer sports programs. The demand for qualified coaches awaits the actions of parents who are interested in the safety of their youthful competitors. Perhaps the increased attention that is currently being directed to sports injuries will be the stimulus that is needed to initiate mandatory certification of coaches.

Injury Prevention and Safety in Youth Sports

Injuries from participation in sports have become so commonplace that they have led to such medical specialities as "sports medicine," "sports massage" and "athletic training." However, the focus of these medical specialities on the injuries of children and youth is of recent origin (Micheli, 1986). The common occurrence of sport-related injuries in young athletes is reflected in the abundant literature devoted to the topic. For example, the 1990 **Bibliography of Youth and Adolescent Sport Medicine Literature**, published by the National Youth Sports Foundation, contains 486 citations of journal articles and titles of 216 books, all published between January, 1984 and June, 1990 (Rooks, 1990).

Although the assumption of risk due to injuries is an accepted part of participation in athletics, it is prudent to ask whether the frequent occurrence of sport-related injuries in young athletes can be abated or alleviated. Some educators and physicians are of the opinion that the majority of sport-related injuries in children and adolescents can be avoided because they are not inherent in the sport itself but are caused by poor supervision, improper conditioning and inadequate equipment (Vinger, 1986). The following sections examine (1) the problems associated with documenting the injury-related experiences in youth sports, (2) the type and severity of injuries sustained by adolescents, and (3) factors that may be contributing to the frequency and severity of injuries in adolescents.

Problems in the Surveillance of Youth Sports Injuries

The recent volume of literature devoted to sport-related injuries of children and adolescents indicates that a major problem exists. The quest for solutions seems even more urgent if there is truth to the contention that the majority of these injuries are due to negligence and not to the nature of the sport. However, proposed changes in the ways that sports are played have traditionally met with great resistance. Frequently, rules that are proposed for the purpose of enhancing performance are not accompanied by the essential scientific evidence of how the modification will affect the safety of the performers. The spearing technique in football, now prohibited, is an apt example of such license without properly determining its effect on sports participants until after a number of catastrophic injuries had been recorded.

Ideally, sports should be governed by rules that are based on the epidemiology of injuries. Knowledge of the circumstances under which injuries are likely to occur is essential to rules committees, whose primary responsibility is the legislation of rules that provide maximum safety for athletes. However, the nature of youth sports and their organizational structure compounds the problems of obtaining information associated with the epidemiology of sports injuries. Many youth sports programs do not require preparticipation physical examinations, thus eliminating the possibility of determining whether pre-existing conditions contributed to the injury or if an athlete should be prohibited from participation entirely. Many agencies do not provide insurance for their participants, thereby reducing the possibility that medical records will be available to the sponsoring organization. In addition, few of the national governing agencies have any evidence of the frequency or severity of injuries sustained by participants in the sport that they govern. Hence, rule modifications are likely to be based on opinion rather than on the epidemiology of injuries.

Despite the difficulty that is intrinsic to the task of documenting sports injuries, numerous groups have established systems of surveillance that include children and adolescents. A brief description of selected surveillance groups and the nature of their data bases are shown in Table 7.

The nature of the databases in Table 7 illustrates the specific nature of many surveillance systems. Therefore, the variety of injuries that occur in adolescent sports is not likely to be recorded in one system. In addition, unless the injuries are catastrophic or fatal they are not likely to be recorded in any of the existing databases.

Table 7 Systems of sports injury surveillance in the United States
(Source: The Physician and Sportsmedicine, Vol. 19, January, 1991)

Name	Location/Address	Nature of Database
American Medical Soccer Association (AMSA)	Birmingham, AL	Collects soccer-related injury information and statistics from members, interested non members, and literature reviews.
Athletic Injury Monitoring System (AIMS)	Eugene, OR	Collects data from member institutions on a variety of sports injuries. Currently conducting studies on artificial turf, preventive knee braces, and protective headgear.
Athletic Health Care System (AHCS)	Seattle, WA	Tracks information about high school athletic injuries, including type of injury, anatomic region affected, time lost, and type of restriction. Also records information on uninjured athletes.
Institute for Aerobics Research (IAR)	Dallas, TX	Conducts scientific investigation of the rates and risks of orthopedic injuries.
Interscholastic Athletic Injury Surveillance System	Mooresville, IN	Collects and analyzes data on injuries that occur among high school athletes and adult recreational athletes in Indiana. Predicts injury trends and provides a means of improving methods to prevent injuries.
National Football Head and Neck Injury Registry	Philadelphia, PA	Collects data on football-related cervical spine and head injuries that cause a player to be hospitalized for 72 hours or that result in death or paralysis.
National Safety Council	Chicago, IL	Provides safety services and materials to companies, government organizations, associations, and private individuals. Data on injury statistics include information on the number of participants, the number of injuries, and the number of fatalities in 30 sports.
National Society to Prevent Blindness	Schaumburg, IL	Collects and analyzes data on sports-related eye injuries using sources such as the US Consumer Product Safety Commission.
Regional Spinal Cord Injury System	Birmingham, AL	A conglomerate of 13 regional systems around the United States: consolidates data on spinal cord injuries and disseminates pertinent information.

Incidence and Severity of Sport-Related Injuries in Adolescence

The problems of surveillance in adolescent sport-related injuries are directly associated with difficulties in assessing the frequency and severity of these injuries. Data on injuries that are available to us have generally been obtained from numerous isolated samples, on a sport-specific basis. Such records provide valuable information, but they generally lack a common nomenclature, standard reporting forms, are retrospective and do not describe the sample from which the data were obtained. Such data are useful for generating hypotheses but they have severe limitations when one attempts to generalize from these samples to a sport population. Table 8 provides an example of information that has been synthesized from selected publications pertaining to sport-related injuries in children and adolescents.

Table 8 Types of studies that document the sport-related injuries of children and adolescents

Authors	Sport	Type of Study	Year	Conclusions
Pettrone FA, Ricciardelli E	Gymnastics	Prospective	1982-83	Most injuries occur during practice (80%). Fatigue plays a role in injury. Clubs which practice more than 20 hours per week showed a significantly higher injury rate.
Priest JD, Weise DJ	Gymnastics	Prospective	1981	The presence of spotters, thicker mats, and formal introduction in how to fall reduce the chances of serious elbow injury.
Tator, C, et al	Ice Hockey	Retrospective	1984	Severe cervical spine injuries are increasing. Causes are due to wearing of helmets, face masks and rougher play.
Pritchett, J	Football	Retrospective	1980	Higher school injury rate according to insurance claims filed, was 23% of participants.
Loosli, A, et al	Softball	Retrospective	1979-1986	Of 200 questionnaires, 81 were returned. Of these, 61 sustained an injury. Injuries were knee (26%), thigh (26%), hand (18%) and ankle (17%).
McCarroll, J. et al	Soccer	Retrospective	1982	Injuries increased as age and competitive level advanced. Injuries were reported as follows: sprains (27%), contusions (25%), fractures (13%), strains (9%), concussions (3%), other (23%).

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Contributing Factors in Adolescent Sport Injuries

Reduction of sport-related injuries in adolescence must begin with an accurate identification of its causative elements. Seldom is an injury directly attributable to a single cause, thus increasing the problem of isolating and modifying the causative variables. Attempting to assign a cause-and-effect relationship to athletic injuries is complicated by the fact that most of our information about such injuries comes from retrospective studies. Despite the paucity of sound scientific data, great strides in the reduction of sport-related injuries have been made. The following sections identify some of the significant attempts to alleviate sports-related injuries.

Equipment Perhaps the most dramatic attempts to enhance the safety of sports participation have come in the area of equipment design and construction. Injuries to the face, eyes and teeth have been markedly reduced in ice hockey, football, lacrosse, baseball and softball by the mandatory wearing of helmets and face masks. Shoulder and hip pads and protective vests have decreased the likelihood of injuries in ice hockey and football. Shin guards are required in soccer, field hockey, ice hockey and for catchers in baseball. Protective goggles are recommended for all indoor racquet sports and visors are in the experimental stages in youth baseball. Protective padding is now commonplace around obstacles such as basketball standards, on walls and floors and the bases of all gymnastics equipment. Knee and ankle braces are generic to active sports participation as are the various types of footwear and mouth protectors.

Adult Supervision There is common agreement among administrators of youth sports that the most important determinant in injury prevention is the quality of the adult supervision. Adults, as coaches, are responsible for the training and conditioning, skill development and inspection of equipment and facilities. Adults are also responsible for their team's adherence to the spirit and letter of the rules that govern competition. Thus, adult coaches who are knowledgeable about the interaction of athletes with the variables that influence their safety are also in the best position to prevent the avoidable experiences that are likely to result in injuries.

Chronological Versus Biological Age Adolescents vary more in biological age than any age group within the span from infancy to adulthood. Thus, a group of chronologically-aged thirteen year old boys and girls may include some who are biologically as young as ten and some who are biologically as old as sixteen. This difference in biological age is also reflected in such parameters as height, weight, muscle mass, total body coordination, anaerobic and muscular endurance and speed of movement. These physical and motoric components are significant during athletic contests, especially in contact and collision-type sports. Late maturing adolescents are likely to be smaller and less able to compete favorably with their age peers in the sports arena. Coaches who do not recognize the differences in abilities and capacities of early and late maturing adolescents are likely to place the late maturers into situations where success is unlikely and injuries are imminent.

Level of Competition One undisputable condition in athletics is that injuries increase in direct proportion to the age and the ability levels of the athletes. Thus, coaches of young, inexperienced athletes are less likely to encounter injuries with their athletes than coaches of older, highly skilled athletes. Exceptions occur in sports such as baseball, where many of the serious injuries are due to an inability of young performers to control the bat or ball.

As athletes grow older they generally acquire the ability to impart greater force to their own movements or to objects that they propel. The interception of objects or other athletes by the athlete's body often leads to injuries, as does the forceful exertion of one's own body. Also, relatively new to youthful competitors is an array of complications know as "overuse injuries," developed from performing repetitive types of tasks such as endurance running, throwing a baseball or serving a tennis ball beyond the tolerance limits of the skeletal or muscular structure. Although overuse injuries are not as prevalent in youth sports as sprains, strains, fractures and contusions, they have become increasingly prominent in the last decade (Goldberg, 1989).

Summary and Conclusions

Increased intensity of competition and the extension of seasonal play to year-around competition has led to a disproportionate rise in the identifiable injuries in youth sports. Although sports-related injuries are a matter of record, most of the studies that produced these data were retrospective, thus compromising their validity as a basis for modification of rules and the design of protective equipment and facilities. Sports injuries are directly related to the age of the competitors and the intensity of competition. Frequently, the cause of injuries in youth sports is attributable to overmatching competitors. Reduction of the eligible age to a two-year span when necessary to gain a sufficient number of competitors and to one-year age spans whenever possible would reduce the problem of having larger, more mature athletes compete against smaller, less biologically mature players. Coaches are in the best position to positively influence attempts to alleviate or reduce the number and severity of sports-related injuries in adolescents.

Patterns of Participation and Attrition in Sports by Adolescents

Competitive sport programs play a large part in the after school lives of children and youth. Martens (1988) estimated that 35 million youth between the ages of 6 and 18 participate in agency-sponsored and interscholastic sports programs. Shaffer (1980) estimated that 6 million youth participate in a variety of school-sponsored sports. A national study of 8th grade students found that 48% participated in varsity sports, while 43% participated in intramural sports (National Education Longitudinal Study, 1988). While these estimates provide some insight into the scope of youth programs, they provide limited information about the nature of the participants' involvement. Specifically, what is the pattern of participation for males and females, different ethnic groups, different ages, and different sports?

In an attempt to answer these questions the Institute for the Study of Youth Sports, with funding support from the Athletic Footwear Council of the Sporting Goods Manufacturers Association, conducted a nationwide study of the participation and attrition patterns of youth between the ages of 10 and 18 years in both agency-sponsored and school-sponsored sport programs (Ewing & Seefeldt, 1989). In order to be nationally representative, data were collected from 17 regional sites around the country. Youth were asked to complete an extensive questionnaire about their participation and attrition patterns, reasons for participating, reasons for dropping out of sport, and changes they would make in sport that, if implemented, would cause them to stay involved in sport. The data presented in this section represent the responses from approximately 8,000 youth of which 51% were girls and 49% were boys. These data will be presented for both school and non-school sponsored programs and will be presented by age, gender and race.

Patterns of Participation and Attrition

Participation Patterns in Agency-sponsored Sports Programs Of the approximately 8,000 youth surveyed, 55% reported having participated in agency-sponsored sports. The vast majority of the youth reported participating on a sport team. Indeed, most youth reported participating on more than one sport team.

Table 9

Participation in the ten most popular non-school sports for boys and girls.

Non-School Sports

	Boys	%		Girls	%
1.	Baseball	31.1	1.	Swimming	26.7
2.	Basketball	30.9	2.	Softball	26.6
3.	Football	27.3	3.	Basketball	22.1
4.	Soccer	22.7	4.	Volleyball	21.2
5.	Swimming	17.8	5.	Gymnastics	17.7
6.	Bowling	14.9	6.	Soccer	17.4
7.	Tennis	12.2	7.	Tennis	16.4
8.	Wrestling	11.7	8.	Bowling	16.4
9.	Flag football	11.7	9.	Baseball	12.5
10.	Track	11.4	10.	Skiing	10.8

Gender differences were found with respect to the sport in which most girls and boys participated (see Table 9). Boys participated most frequently in baseball (31%), basketball (31%), football (27%) and soccer (23%) while the girls' greatest participation was in swimming (27%), softball (27%), basketball (22%) and volleyball (21%). The overall participation of boys was slightly higher than that of girls but this was due to their high participation levels in the four top-ranked sports. In the remaining sports the percent of participation for boys and girls was similar.

Boys and girls participated in some of the same sports, but girls had a tendency toward individual sports while boys preferred team sports. Six of the ten most popular non-school sports were common to boys and girls.

Sports participation by race was similar in some sports (baseball, basketball) but varied greatly in others such as tennis, golf, skiing and swimming. Of particular note was the low percentage of African American and Hispanic American youth involved in soccer and bowling compared to Caucasian, Asian American and Native American youth. These sports are relatively inexpensive. However, why African American and Hispanic American youth did not participate at similar rates to other ethnic groups is not clear from these data.

When reviewing data by race it is important to remember that not all minority youth come from poor, inner-city communities. This is evident, for example, from the number of African American youth who reported participating in figure skating (6.0%) and gymnastics (14.1%). These are two of the more expensive sports; yet, the percent of African American youth participants was comparable to the percent of youth in other ethnic groups. Overall, however, African American and Hispanic American youth were underrepresented in individual sports in which fees were a prerequisite to participation, e.g., bowling, golf, ice hockey, swimming, and tennis. Table 10 presents participation patterns in selected sports[1] for the racial groups in the study.

The participation pattern of youth in selected sports by age is presented in Table 11. The basic trend is to have a higher rate of participation at age 10 and a rather steady decline in the participation rate from 10 to 18 years of age. The most dramatic display of this decline can be seen with baseball and swimming, where approximately 42% of the 10 year olds reported participating on an agency-sponsored team compared to 12.0% of the 18 year olds. These data suggest a slightly different participation pattern to that reported by Sapp and Haubenstricker (1978), who noted that the decline in Michigan's youth sport participation was highest for children between the ages of 11 and 13 years. The decline in agency-sponsored sport participation may reflect a lack of emphasis on older youth in these programs or the increased popularity of competitive opportunities provided by the scholastic sport programs.

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[1] The term "selected" will refer to the variables listed according to gender, race and age in Tables 10, 11, 13, 14, 16, 17, 19, 20, 24 and 25 below, which are selected from much larger lists condensed for presentation in this paper.

Table 10

Percent of individuals, by race, who joined or will join a selected non-school sport team during the 1987-1988 school year.

	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. Baseball	24.4	21.5	16.2	17.6	27.7
2. Basketball	29.0	37.6	14.1	20.3	27.7
3. Football	17.6	21.1	12.1	14.4	20.8
4. Swimming	27.3	20.7	9.9	25.7	28.3
5. Softball	21.3	22.5	10.0	15.0	23.1
6. Soccer	25.2	12.8	10.9	33.7	23.7
7. Volleyball	17.5	20.6	10.1	26.7	21.4
8. Gymnastics	13.4	14.1	7.3	12.3	16.8
9. Bowling	19.5	13.6	6.2	20.3	18.5
10. Tennis	17.1	12.7	6.6	33.2	13.3

Table 11

Percent of individuals, by chronological age, who joined or will join selected non-school sports teams during the 1987-1988 school year.

	CHRONOLOGICAL AGE								
	10	11	12	13	14	15	16	17	18
1. Baseball	42.7	30.7	26.6	28.1	20.3	18.7	17.0	14.0	12.5
2. Basketball	40.5	33.4	31.5	30.5	27.2	25.8	25.2	20.5	17.8
3. Football	25.6	23.0	21.0	18.5	15.7	17.3	14.3	11.2	11.2
4. Swimming	41.6	32.2	27.3	26.2	21.3	20.8	19.6	16.0	12.1
5. Softball	26.9	21.7	20.2	22.5	20.6	19.7	19.9	15.9	11.2
6. Soccer	38.5	35.6	30.0	25.0	18.5	15.6	11.4	9.2	11.0
7. Volleyball	20.9	21.0	18.8	17.3	18.0	17.3	14.0	15.8	9.3
8. Gymnastics	25.3	20.3	15.1	17.9	11.1	9.2	6.3	5.2	3.3
9. Bowling	24.4	24.3	14.7	18.7	13.7	15.3	15.2	12.9	10.6
10. Tennis	16.7	22.2	15.2	18.9	14.6	14.4	13.1	11.2	7.8

Participation Patterns in Scholastic Sport Programs The percent of participants who played in school-sponsored sports was reduced by approximately one-half of those who played non-school sports. This reduction in participation applied to both boys and girls. This reduction may be attributable to the fact that most schools offer one team per grade (particularly during the junior high school years) and only one or two teams during the high school years. Thus, opportunities for sports participation are greatly reduced for youth when they enter the middle, junior and senior high schools. Although there has been an increase of participation in interscholastic sports for girls over the past decade (National Federation of State High School Associations, 1990), the number of boys participating continues to exceed the number of girls. Table 12 presents the sport participation rates for the 10 most popular sports by gender. The most popular sports for boys included football, basketball, track and field, and baseball. For the girls, the most popular sports were track and field, basketball, softball and volleyball. Of the 10 most popular sports for both boys and girls, one-half were team sports.

Participation in school-sponsored sports by race revealed that Asian American and African American students participated to a greater extent, proportionately, than the Caucasian, Hispanic American or Native American students (see Table 13). The most notable pattern among the data is the relatively large proportion of African American students (26%) who reported participating in basketball.

The greatest percent of participation in school sports was at 13, 14 and 15 years of age with a gradual reduction in percent by age thereafter (see Table 14). The availability of more opportunities through larger team rosters at the junior high and freshman levels may be one reason for the apparent attrition at the older ages. The highly competitive nature of many high school sports experiences may also dissuade moderately-skilled junior and senior students from competing for positions on the teams.

Table 12

Percent of participation in the ten most popular interscholastic sports for boys and girls during the 1987-1988 school year.

Interscholastic Sports

Boys	%	Girls	%
1. Football	22.7	1. Track & Field	12.3
2. Basketball	16.4	2. Basketball	12.2
3. Track & Field	15.5	3. Softball	10.9
4. Baseball	14.8	4. Volleyball	9.5
5. Soccer	9.5	5. Soccer	6.8
6. Gymnastics	6.6	6. Swimming	6.4
7. Tennis	6.4	7. Tennis	6.1
8. Cross Country	6.1	8. Cross Country	5.9
9. Skiing	5.4	9. Skiing	4.6
10. Flag Football	5.1	10. Baseball	1.6

Table 13

Percent of individuals, by race, who joined or will join a selected school sport team this year during the 1987-1988 school year.

	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. Baseball	9.0	13.0	9.0	5.9	6.9
2. Basketball	13.9	26.0	7.3	14.4	12.1
3. Football	11.5	18.8	8.9	5.3	12.1
4. Track & Field	14.2	8.8	8.5	15.0	19.1
5. Softball	7.3	10.2	3.7	10.7	5.8
6. Soccer	8.7	6.9	5.3	22.5	6.9
7. Volleyball	8.0	9.3	6.3	18.2	7.5
8. Gymnastics	4.4	6.5	2.2	7.0	9.8
9. Swimming	5.6	7.0	3.1	6.4	9.2
10. Tennis	5.6	8.4	4.9	17.6	4.0

Table 14

Percent of individuals, by chronological age, who joined or will join selected school sports teams this year during the 1987-1988 school year.

		CHRONOLOGICAL AGE						
		12	13	14	15	16	17	18
1.	Baseball	5.8	14.3	13.0	14.4	11.7	11.0	12.6
2.	Basketball	14.6	23.7	25.9	22.1	16.0	10.9	11.0
3.	Track & Field	10.5	24.0	20.9	20.6	17.6	14.0	14.3
4.	Swimming	4.8	12.2	7.9	7.5	6.4	5.1	6.1
5.	Softball	5.3	12.3	12.4	11.1	8.9	7.9	4.1
6.	Soccer	9.1	14.3	13.0	11.6	7.2	6.9	9.9
7.	Volleyball	10.8	15.1	13.7	10.2	6.7	6.3	7.6
8.	Gymnastics	7.9	13.4	5.4	4.3	2.4	3.2	3.2
9.	Football	6.1	14.1	15.4	20.7	17.2	16.8	14.5
10.	Tennis	5.1	12.2	8.0	8.3	9.0	6.2	6.3

Basketball was the most popular school-sponsored sport at almost all age levels. Participation in track and field, which can accommodate large numbers of participants, also ranked consistently high for all age levels. Tackle football presents an interesting pattern, with an increase in participation rates from 12 through 15 years and a decline occurring from ages 16 through 18. Paradoxically, the participation rates in football, where larger numbers of students can be accommodated, is lower than in basketball where a very limited number of students are selected for a team because of the limitations imposed by team size. The difference in participation rates may suggest that more schools offer basketball than offer football.

Why Adolescents Participate in Sports

The literature over the past 35 years has been clear as to the main reason that youth participate in sport (e.g., Gill, Gross & Huddleston, 1981; Sapp & Haubenstricker, 1978; Skubic, 1956). The most important reason for participating in sport is "to have fun." Closely associated with fun, youth report that they want to learn or improve their skills and that they enjoy competition. Unfortunately, almost all of the early studies on reasons for participating in sports were limited by sample selection (Caucasian youth) and small sample sizes.

Based on the evidence from the 8,000 youth who responded to the participation and attrition questionnaire, a more comprehensive view of the reasons for participating in sports is now possible. Specifically, the data were reported by gender, race and age. Reasons for participating in both agency-sponsored and school-sponsored sport programs will be presented.

Reasons for Participating in Non-School Sport Programs[2] Male and female youth were very consistent in their reasons for participating in agency-sponsored sport programs (see Table 15). Specifically, 9 of the top 10 reasons were identical for boys and girls. The most important reason for participating remained "to have fun." Although the rank order differs slightly, the message is clear that both boys and girls participate to learn skills, to get fit and to enjoy competition. These reasons are clearly within the domain of intrinsic motivation for participating in sports.

The reasons for participating in agency-sponsored sports by race are presented in Table 16. Although these reasons are very similar to those by gender, there are some interesting variations. Specifically, African American and Native American youth rated "to stay in shape" and "to do something I'm good at" as the top reason, respectively. Native American youth rated "to have fun" as their third reason. Although it is difficult to interpret this somewhat different ordering of reasons by the African

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[2] In the survey, the term non-school sport programs was used to denote participation opportunities on teams sponsored by agencies, communities or clubs that were not a regular part of a schools' sport offerings.

American and Native American youth, it is tempting to conclude that African American and Native American youth placed a high premium on success in sport and understood the importance of conditioning and skill to their success. They also appear to gain some recognition and reward from doing something at which they excel. Certainly the top 10 reasons for all ethnic groups are very similar, but the rank order may suggest a subtle difference in motivation for involvement in sport.

The means of the reasons by age for participating in selected non-school sponsored sports is provided in Table 17. Again, there is much similarity in the rank order of reasons by age. One notable difference, if one looks at only those reasons that have a mean rating of 4.0 or better, is the inclusion of "to play as part of a team" for the youth ages 10 through 12. This reason drops below 4.0 for ages 13 through 18. In addition, at age 17 "for the challenge of competition" achieves a mean rating of 4.0 or better. These data suggest that the reasons are quite stable across age groups for the non-school sponsored sports.

Table 15

Ten most frequently selected reasons why boys and girls play non-school sports, ranked according to mean importance.

Reasons for Participating
(Non-School Sports)

	Boys		**Girls**
1.	To have fun	1.	To have fun
2.	To do something I'm good at	2.	To stay in shape
3.	To improve my skills	3.	To get exercise
4.	For the excitement of competition	4.	To improve my skills
5.	To stay in shape	5.	To do something I'm good at
6.	For the challenge of competition	6.	To learn new skills
7.	To get exercise	7.	For the excitement of competition
8.	To learn new skills	8.	To play as part of a team
9.	To play as part of a team	9.	To make new friends
10.	To go to a higher level of competition	10.	For the challenge of competition

Table 16

Ten most frequently selected reasons for participating in non-school sports, by race.

	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. To have fun	4.59	4.26	4.39	4.37	4.32
2. To do something I'm good at	4.23	4.21	4.22	4.03	4.48
3. To improve my skills	4.19	4.24	4.23	4.11	4.32
4. To stay in shape	4.14	4.30	4.22	4.13	4.39
5. To get exercise	4.17	4.02	4.07	4.04	4.21
6. For the excitement of competition	4.07	4.01	3.90	3.77	4.11
7. For the challenge of competition	3.92	3.92	3.95	3.75	4.14
8. To learn new skills	4.04	4.16	4.11	3.98	4.22
9. To play as part of a team	3.93	4.04	3.95	3.92	4.09
10. To go to a higher level of competition	3.72	4.05	3.90	3.90	3.96

Table 17

Ten most frequently selected reasons for participating in non-school sports, by chronological age.

	CHRONOLOGICAL AGE								
	10	11	12	13	14	15	16	17	18
1. To have fun	4.55	4.66	4.56	4.51	4.47	4.34	4.54	4.51	4.58
2. To do something I'm good at	4.36	4.28	4.33	4.23	4.19	4.21	4.19	4.10	4.16
3. To improve my skills	4.01	4.08	4.24	4.24	4.29	4.32	4.30	4.22	4.18
4. To stay in shape	4.22	4.17	4.20	4.19	4.21	4.13	4.09	4.12	4.32
5. To get exercise	4.13	4.18	4.07	4.15	4.14	4.10	4.09	4.21	4.26
6. For the excitement of competition	3.86	4.04	3.98	4.01	4.11	4.15	4.10	4.13	4.11
7. For the challenge of competition	4.00	3.76	3.96	3.95	3.84	3.99	3.96	4.03	3.91
8. To learn new skills	4.19	4.05	4.13	4.02	3.99	4.11	4.06	3.98	4.08
9. To play as part of a team	4.09	4.07	4.10	3.88	3.94	3.95	3.75	3.75	3.94
10. To go to a higher level of competition	3.97	3.78	3.88	3.81	3.85	3.96	3.83	3.75	3.94

Reasons for Participating in School-sponsored Sport Programs Males and females were less consistent in their rankings of reasons for participating in scholastic sport programs. However, the top-ranked reason for participating was "to have fun" (see Table 18). Six of the top 10 reasons were similar, but 4 of the reasons were quite different. Specifically, males identified the following reasons higher than female athletes: "for the challenge of competition," "to win," "my parents or close friends want me to play," and " to go to a higher level of competition." Females rated the following reasons higher than males: "to get exercise," "to learn new skills," "I like the coaches or teachers," and "for the team spirit." These differences in the top 10 reasons for scholastic sports participation mirror the greater emphasis that is placed on outcome in sports by males and the need to learn more about sports and the social experience of the females. Because the sport skills of males and females are quite different, with males having an edge in physical skills, involvement at a more intense level of competition may result in somewhat different orientations of females and males.

When the reasons for participating in interscholastic sports are viewed by race, there is both similarity and divergence (see Table 19). While having fun remains an important reason for all races, African American, Hispanic American and Native American youth rated "to improve my skills" as a more important reason. The most notable difference was the high value given to "doing something I'm good at" by the African American youth. African American and Hispanic American youth rated "to go to a higher level of competition" and "to win" as more important reasons for participating in school sports than Caucasian, Asian American and Native American youth.

Table 18

Ten most frequently selected reasons why boys and girls play interscholastic sports, ranked according to mean importance.

Reasons for Participating (School Sports)

Boys	Girls
1. To have fun	1. To have fun
2. To improve my skills	2. To stay in shape
3. For the excitement of competition	3. To improve my skills
4. To do something I'm good at	4. To get exercise
5. To stay in shape	5. To do something I'm good at
6. For the challenge of competition	6. To play as part of a team
7. To play as part of a team	7. To learn new skills
8. To win	8. For the excitement of competition
9. My parents or close friends want me to play	9. I like the coaches or teachers
10. To go to a higher level of competition	10. For the team spirit

Table 19

Ten most frequently selected reasons for participating in school sports, by race.

	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. To have fun	4.48	4.23	4.22	4.37	4.11
2. To do something I'm good at	4.22	4.50	4.29	3.99	4.27
3. To improve my skills	4.30	4.44	4.44	4.27	4.38
4. To stay in shape	4.25	4.35	4.37	4.18	4.49
5. To get exercise	4.19	4.06	4.16	4.23	4.29
6. For the excitement of competition	4.20	4.10	4.30	3.92	4.07
7. For the challenge of competition	3.99	4.08	4.10	3.75	4.00
8. To learn new skills	3.91	4.14	4.09	4.12	4.10
9. To play as part of a team	4.13	4.17	4.23	4.00	4.25
10. To win	3.78	4.18	4.16	3.97	3.92

Why Adolescents Drop Out of Sports

The reasons that youth gave for dropping out of sport were the antithesis of those given for participating in sport. From age 10 through age 16 "not having fun" and "no longer interested" in the sport received the highest rating as reasons for dropping out of sport (see Table 20). For students of ages 17 and 18, the above reasons were joined by "wanted to get a job." Younger athletes, who were primarily dropouts from non-school sponsored sports, rated the following reasons higher than older children: "practices were more boring," "players were too rough," "did not get to play very much," "teammates did not like me," "conflict with other sports," "no sport for my age group," and "embarrassed by how I look in my uniform."

When viewed by gender, the top reasons were very similar (see Table 21). Issues related to interest, fun, time, and competency of the coach constituted the main reasons for dropping out. Based on statistical tests, females rated "participation placed too much pressure on me," "players in this sport are too rough," "practices and games were scheduled at times I could not attend," "never felt like I belonged with the team," "embarrassed by how I looked in my uniform," and "could not afford the equipment" higher than males. Likewise, males rated "always on a losing team," "participation placed too much physical stress (e.g., injuries) on me," "wanted to get a job," and "sport conflicted with other sports I wanted to play" higher than females.

The views of dropouts by race are presented in Table 22 in terms of selected reasons for discontinuing participation. Again, more similarities than differences are noted. Statistical treatment revealed that African American and Hispanic American youth rated the following reasons for dropping out higher than Caucasian youth: "too much emphasis on winning," "always on a losing team," "participation did not improve my physical fitness," "participation placed too much physical stress (injuries) on me," "players were too rough," "did not get to play very much," "games and practices were scheduled at times I could not attend," "wanted to get a job," "father did not want me to play," "mother did not want me to play," "needed more time to study," and "could not afford the equipment." No other statistical differences were found.

Table 20

Ten most frequently selected reasons for dropping out of school and non-school sports, by chronological age.

	CHRONOLOGICAL AGE								
	10	11	12	13	14	15	16	17	18
1. I was no longer interested in this sport	2.82	3.12	3.07	2.98	3.08	3.01	3.10	2.84	2.76
2. I was not having fun	2.95	3.17	3.12	2.99	2.94	2.97	2.90	2.73	2.71
3. The sport took too much time	2.45	2.41	2.44	2.54	2.66	2.64	2.58	2.52	2.49
4. I needed more time to study	2.62	2.71	2.54	2.47	2.61	2.54	2.40	2.45	2.66
5. The coach played favorites	2.62	2.54	2.48	2.41	2.40	2.35	2.61	2.39	2.42
6. There was too much pressure	2.55	2.65	2.52	2.52	2.41	2.31	2.55	2.51	2.54
7. The coach was a poor teacher	2.62	2.57	2.63	2.38	2.39	2.41	2.58	2.47	2.53
8. I was tired of playing and practicing	2.60	2.62	2.61	2.37	2.35	2.39	2.49	2.49	2.39
9. I wanted to participate in other non-sport activities	2.24	2.55	2.58	2.45	2.53	2.36	2.49	2.44	2.40
10. Too much emphasis on winning	2.63	2.39	2.45	2.32	2.44	2.28	2.42	2.47	2.56

Table 21

Ten most frequently selected reasons for dropping out of sports, ranked according to mean importance.

Reasons for Dropping Out of Sports
(School and Non-School)

Boys	Girls
1. I was no longer interested	1. I was no longer interested
2. It was no longer fun	2. It was no longer fun
3. The sport took too much time	3. I needed more time to study
4. The coach played favorites	4. There was too much pressure
5. The coach was a poor teacher	5. The coach was a poor teacher
6. I was tired of playing	6. I wanted to participate in other non-sport activities
7. There was too much emphasis on winning	7. The sport took too much time
8. I wanted to participate in other non-sport activities	8. The coach played favorites
9. I needed more time to study	9. I was tired of playing
10. There was too much pressure	10. Games and practices were scheduled when I could not attend

Table 22

Ten most frequently selected reasons for dropping out of school and non-school sports, by race.

	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. I was no longer interested in this sport	3.03	2.93	2.80	2.68	2.72
2. I was not having fun	2.95	2.89	2.89	2.80	2.96
3. The sport took too much time	2.50	2.56	2.57	2.58	2.39
4. I needed more time to study	2.39	2.97	2.85	2.87	2.84
5. The coach played favorites	2.43	2.58	2.57	2.30	2.47
6. There was too much pressure	2.47	2.54	2.60	2.61	2.53
7. The coach was a poor teacher	2.45	2.72	2.58	2.26	2.79
8. I was tired of playing and practicing	2.46	2.47	2.43	2.54	2.34
9. I wanted to participate in other non-sport activities	2.44	2.57	2.55	2.75	2.42
10. Too much emphasis on winning	2.32	2.71	2.73	2.62	2.44

One of the interesting sidelights about dropouts was found in the descriptive characteristics of dropouts. Male dropouts had played 3.2 years on average before withdrawing from the sport compared to 2.5 years for females. Certainly, both the males and females have given the sport enough time to determine if this sport was for them. Also, male and female dropouts reported that they (1) played "more than half the game" at the time they dropped out; (2) "somewhat" enjoyed being an athlete in the sport from which they withdrew; and (3) rated their ability in the sport dropped as the same as the other members of their team. These data suggest that there are a number of dynamics that influence an athlete's decision to persist in or to drop out of sport.

How Sports Must Change to Accommodate Adolescents

The students in this study were asked to rate various changes to sport programs that would result in their staying involved in, or returning to, a dropped sport. The boys and girls in this study were in total agreement as to the top 10 changes to be made in sport. As shown in Table 23, the only gender difference was the rank order of the changes. The overall recommendation from the youth was to make "practices more fun." Boys were slightly more concerned with increased playing time than girls. Both groups were clearly concerned about coaches' knowledge of the sport and their understanding of the people they are coaching. Conflict with other activities was also a clear concern to both boys and girls.

Statistically, males and females differed on only 4 of the proposed changes. Males reported receiving more pressure from parents than females. This pressure was felt by parents' attendance at the games. Males indicated a desire to play again if they would "not get hurt", and if they could play in leagues with players of approximately the same ability.

Table 24 reports suggested changes to sport programs as rated by youth of different ages. Overall, there was general agreement among the age groups. The only statistically significant results occurred in "sport were offered for my age group" and "practices were more fun." Specifically, 12 and 13 year old dropouts wanted more opportunities to continue participation in the dropped sport compared to the other age groups. It is at ages 12 and 13 that many youth find non-school sport opportunities diminishing or being maintained for the elite athlete only. Likewise, junior and senior high schools may not provide interscholastic competition in a child's favorite sport, such as soccer.

The second significant age difference resulted with respect to practices being made more enjoyable. Younger children, of ages 10 to 12 years, expressed greater concern with practices than the older children. Older children (17 and 18 year olds) may have come to accept practices as work conducted by autocratic coaches. Note the decreasing rating for this change from ages 12 to 17.

Table 25 provides means for selected changes to sport programs by race. There was statistical disagreement on virtually half of the proposed changes. This disagreement on proposed changes occurred because African Americans and Hispanic Americans differed from Caucasians on the following changes: "practiced less," "coaches understood players better," "the season were shorter," "parents were not allowed at games," "not get hurt," "equipment were less expensive," "there were more or closer facilities," and "sport did not need special equipment." Hispanic Americans also differed from Caucasians on "coaches not yell as much" and "parents stop pushing me." Hispanic Americans rated both changes higher than Caucasians.

Summary and Conclusions

The similarity in both school and non-school sponsored programs between the participation patterns of males and females is encouraging. However, more needs to be done to increase the participation rates of females. Boys and girls participated in the same sports, although girls had a slightly higher rate of participation in individual sports in non-school programs. Participation rates by race varied widely. African American and Hispanic American youth participated similarly in baseball and basketball, but were underrepresented in soccer and volleyball and in individual sports. Participation rates for all youth in non-school programs were highest for 10 year old youth and declined steadily from 10 to 18 years of age.

Table 23

Children's perceptions of changes that would induce them to play again, ranked according to mean importance.

Changes Needed in Sports

I would play again if:

Boys	Girls
1. Practices were more fun	1. Practices were more fun
2. I could play more	2. Practices and games didn't conflict with my studies
3. Coaches understood players better	3. Coaches understood players better
4. Practices and games didn't conflict with my studies	4. Practices and games didn't conflict with my social life
5. The coach was a better teacher	5. I could play more
6. The coach understood the sport better	6. The coach was a better teacher
7. Practices and games didn't conflict with my social life	7. Games and practices were scheduled at different times
8. Games and practices were scheduled at different times	8. The coach understood the sport better
9. The coach didn't yell so much	9. There was less emphasis on winning
10. There was less emphasis on winning	10. The coach didn't yell so much

Table 24

Ten most frequently suggested changes to make in sport programs, by chronological age.

	CHRONOLOGICAL AGE								
	10	11	12	13	14	15	16	17	18
I would play again if:									
1. Practices were more fun	3.30	3.23	3.18	2.99	3.02	3.07	2.85	2.69	2.45
2. I could play more	2.94	2.95	2.94	2.81	2.77	2.87	2.69	2.59	2.56
3. Practices and games didn't conflict with my studies	2.64	2.82	2.83	2.81	2.77	2.94	2.76	2.86	2.77
4. Coaches understood players better	3.23	3.05	3.04	2.84	2.75	2.82	2.64	2.72	2.60
5. The coach was a better teacher	2.64	2.62	2.62	2.54	2.46	2.44	2.25	2.35	2.10
6. Practices and games didn't conflict with my social life	2.63	2.79	2.79	2.71	2.71	2.86	2.67	2.61	2.53
7. The coach understood the sport better	2.75	2.82	2.84	2.62	2.54	2.61	2.34	2.46	2.45
8. Games and practices were scheduled at different times	2.80	2.76	2.72	2.67	2.56	2.65	2.47	2.41	2.35
9. The coach didn't yell as much	2.91	2.68	2.74	2.50	2.39	2.42	2.19	2.13	2.06
10. There was less emphasis on winning	2.64	2.62	2.62	2.54	2.46	2.44	2.25	2.35	2.10

Table 25

Ten most frequently suggested changes to make in sport programs, by race.

I would play again if:	Caucasian	African Amer.	Hispanic Amer.	Asian Amer.	Native Amer.
1. Practices were more fun	2.94	3.01	3.14	3.38	3.16
2. I could play more	2.70	2.89	3.12	2.49	3.04
3. Practices and games didn't conflict with my studies	2.71	3.03	3.04	3.14	2.82
4. Coaches understood players better	2.72	3.09	3.12	2.87	3.10
5. The coach was a better teacher	2.35	2.65	2.84	2.48	2.81
6. Practices and games didn't conflict with my social life	2.67	2.81	2.83	2.60	2.93
7. The coach understood the sport better	2.47	2.92	2.91	3.11	2.69
8. Games and practices were scheduled at different times	2.51	2.68	2.79	3.11	2.69
9. The coach didn't yell as much	2.34	2.58	2.66	2.57	2.83
10. There was less emphasis on winning	2.35	2.65	2.84	2.48	2.81

Within the school-sponsored sport program, participation rates dropped by one-half over that reported in the non-school sport programs. Males had a higher rate of participation in school programs than females. The most popular sports for males were football, basketball, track and field, and baseball. For girls, the most popular sports were track and field, basketball, softball, and volleyball. Participation by race revealed that Asian American and African American students participated at higher rates, proportionally, than the Caucasian, Hispanic American and Native American students. In basketball, 26% of the African American students reported participating on a school team. As with the non-school program, the highest percentage of participation was found for the younger students (ages 13 to 15) with a steady decline in participation to 18 years of age.

Youth reported participating in school and non-school sports "to have fun." Youth also wanted to learn and improve their sport skills and indicated that they enjoyed competition. Boys and girls were very similar in their reasons for participating. Within non-school sponsored sports few differences were found by race among the reasons for participating. The main reasons for participating were the same as above. However, of interest was the finding that African American and Native American youth rated "to stay in shape," and "to do something I'm good at" higher than others. When viewed by age, the reasons for participating remained consistent. Younger athletes were more interested in participating as part of a team and less interested in competition than the older youth.

Gender differences appeared in reasons for participating in school-sponsored sports with males deriving greater status from sport participation than females. The reasons for participating by race suggested that African American and Hispanic American youth participate in sport programs to improve skills and to go to higher levels of competition and because they are good at sports.

Males and females agreed that the reasons they dropped out of sport were a lack of interest and not having fun. However, females felt more pressure from parents and others than did males. This perceived pressure may be a result of the limited exposure that many girls had to competitive experiences, compared to boys. Girls also experienced greater conflict in managing studies and a variety of sports than did males. This conflict may reflect the very limited sport opportunities for females beyond high school. Differences in reasons for dropping out existed for students of different ages. Specifically, older youth wanted to get a job and younger youth were more concerned about how they interacted with teammates, opportunities to play and how practices were conducted. Economic reasons for dropping out appeared to be more important to both African American and Hispanic American youth. In addition, lack of parental support, plus greater pressure to be successful in sport, distinguished African American and Hispanic American youth from Caucasian youth.

The youth were quite clear in the changes that needed to be made in sport for them to continue. The top 10 changes could be categorized as coaching changes, scheduling changes and organizational changes. Younger students were more concerned about practices being more fun and having greater opportunity to participate after age 12. African American and Hispanic American youth placed greater emphasis on economic changes, reducing parental pressures and coaches understanding players better.

The suggested changes to sport programs are issues that sponsoring organizations could address at the local level. Greater sensitivity should be given to scheduling games and practices to reduce conflict with job opportunities. Perhaps most important to teenage retention in sport is the education of coaches about working with teenagers and enhancing adult understanding of the unique characteristics and needs of adolescents.

Issues of Gender in Youth Sports

Historically, gender myths and stereotypes have been used as reasons to withhold opportunity for girls and women to participate in sport. Many arguments have been forwarded as to why women should be protected from participation. Perhaps the most pervasive argument has been for physiological reasons. For example, it has been argued that women in sport might get hurt, might damage their reproductive organs, or might develop muscles from working with weights (Coakley, 1990). When physiological reasons failed to be corroborated by research or to deter participation, social or psychological reasons were presented. For example, participation in sport was thought to diminish a girl's femininity and to expose overly-emotional girls to too much pressure. These myths were thought to be self-evident by the low numbers of girls and women participating (Coakley, 1990). Other arguments were that women lacked many of the psychological attributes to compete in sport such as self-confidence, aggressiveness, and mental toughness. A few opponents of women in sport argued that women should not be allowed to compete because they cannot participate at the same level as men (Coakley, 1990).

The destruction of these myths was followed by controversy over their ramifications for sports participation in the schools. Questions were raised as to what schools were to do in the absence of a girl's team and whether girls should be allowed to participate on boy's teams. Title IX of the Educational Amendments Act of 1972 served as the catalyst to provide opportunities for girls and women in sport, but has neither been enforced nor been entirely effective in altering attitudes about females participating in competitive sports. For example, Bill Knepper (pitcher for the Houston Astros) during the 1988 baseball season stated "I don't think women were created by God to be a physical, hard person. I think God created women to be feminine" (cited in Coakley, 1990).

During the 1980's, controversy centered around increased coaching and administrative opportunities created by an influx of new female participants, whether males should coach female teams, and why women were not becoming coaches of male teams. During this time, the number of girl's sports teams increased, the number of coaching and officiating opportunities increased for men, and the number of female coaches and administrators decreased. This issue has been discussed in state and national referendums (e.g., Women in Sport Leadership Conferences, New Agenda Conferences), which has succeeded in raising consciousness, but has not been entirely successful in reversing the decline of women leaders in sport.

Little can be done to alter the above trends so long as men continue to dominate key leadership positions in sports, and thereby continue the tendency to exclude female perspectives from consideration. Sport, like any other social practice, is no more inherently male than any other activity. Yet, the traditional attributes of masculinity, such as aggressiveness, competitiveness, leadership and independence remain attached to sports participation. Hence, under the continued leadership of men, sport can be expected to offer special advantages to male versus female participants, coaches and administrators. Overall, the picture for the participation of girls and women in sport, though improved, is less than satisfactory.

Gender Differences in Participation Opportunities

Participation rates With increased opportunities to participate in sport, women have responded in increasingly larger numbers. In 1970, 300,000 high school girls participated in interscholastic sports and 16,000 women participated in intercollegiate athletics (Coakley, 1986). During the next decade, with the impact of the women's movement and passage of Title IX, a significant increase occurred in the number of females participating in sport, so that in 1984 there were 1.8 million high school and 150,000 college female athletes (Coakley, 1986). Figure 1 shows the participation patterns in interscholastic sports from 1971 to 1987. Table 26 details the increases in intercollegiate sports from 1966-67 to 1987-88.

A similar increase in female participation has been observed among elite competitors. For example, over the course of 24 Summer Olympiads, the number of women competitors has increased from none in 1896 to 2,476 in 1988 (Boutilier & SanGiovanni, 1983). Table 27 presents the total number of women competitors by Olympiad. The number of Summer Olympic events open to women has increased from none in 1896 to 86 in 1988. A comparison of the number of events open to men and women is presented in Figure 2.

Figure 1

Number of boys and girls participating in interscholastic athletics, 1970-71 to 1986-87.

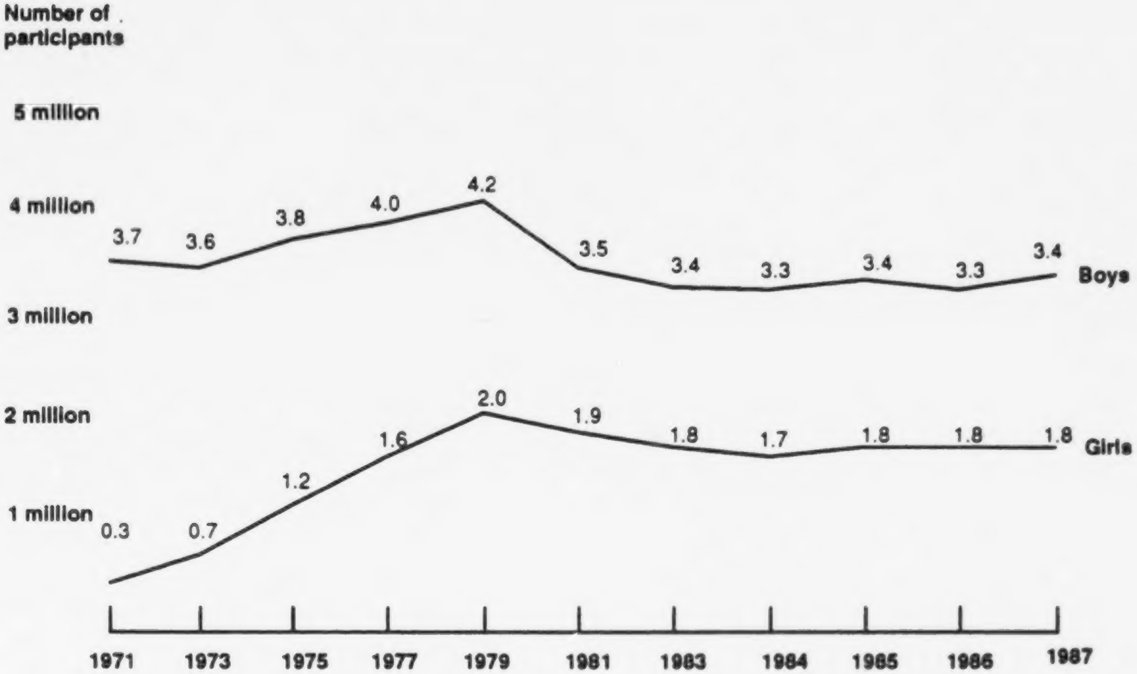


Table 26 Participation in intercollegiate athletics by gender.

	1966-67	1971-72	1976-77	1983-84	1987-88
Males	154,179	172,447	170,304	188,594	178,941
Females	15,727	31,852	63,375	84,765	89,825
Percentage female	9%	13%	27%	31%	33%

Source: Adapted from Table 2 in Birrell (1987).

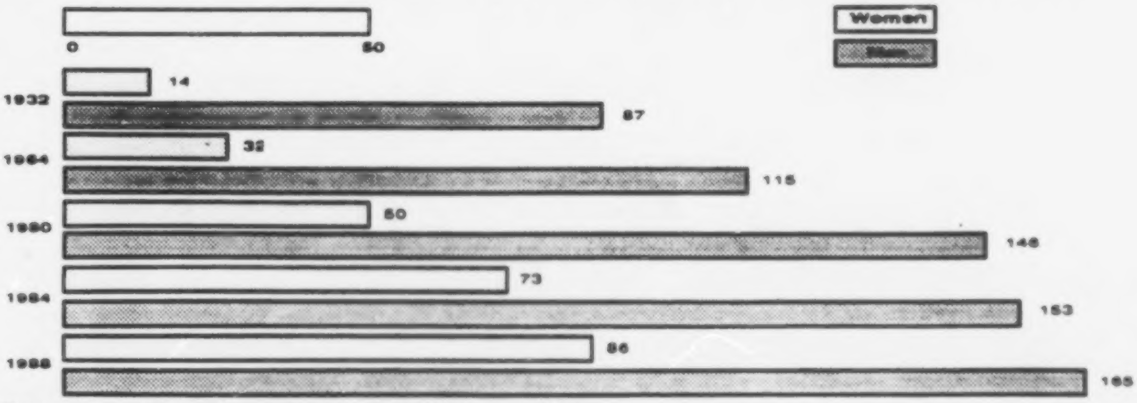
Source: Modified from Coakley, 1990

Table 27

Male and female athletes in the modern Summer Olympic Games.

Year	Place	Countries represented	Male athletes	Female athletes	Percent female
1986	Athens	13	311	0	0%
1900	Paris	22	1,319	11	0.01
1904	St. Louis	12	617	8	1.3
1908	London	22	1,999	36	1.8
1912	Stockholm	28	2,490	57	2.2
1916	No Olympics due to war - scheduled to be held in Berlin				
1920	Antwerp	29	2,543	64	2.5
1924	Paris	44	2,956	136	4.4
1928	Amsterdam	46	2,724	290	9.6
1932	Los Angeles	47	1,281	127	9.0
1936	Berlin	49	3,738	328	8.1
1940	Olympics (scheduled for Tokyo) cancelled due to World War II				
1944	Olumpics cancelled due to World War II				
1948	London	59	3,714	385	9.4
1952	Helsinki	69	4,407	518	10.5
1956	Melbourne	71	2,958	384	11.5
1960	Rome	83	4,738	610	11.4
1964	Tokyo	93	4,457	683	13.3
1968	Mexico City	112	4,750	781	14.1
1972	Munich	122	6,077	1,070	17.6
1976	Montreal	88	4,915	1,274	20.6
1980	Moscow	81	4,238	1,088	20.4
1984	Los Angeles	140	5,458	1,620	22.8
1988	Seoul	160	7,105	2,476	25.8

Figure 2 Number of Summer Olympic events open to women and men.



Source: Modified from Coakley, 1990

Attrition rates The attrition rate for youth between the ages of 11 and 18 was reported to be 35% in 1978 (Sapp & Haubenstricker, 1978). Gould (1987) synthesized several studies that reported attrition rates in the United States, Australia and Canada and found that the average attrition rate was also 35%. There was considerable variance among the studies with rates varying from 22 to 59%. Withdrawal from sport is characteristic of both males and females during adolescence (Orlick, 1974; Sapp & Haubenstricker, 1978; Pooley, 1981). Evidence also suggests that participation in competitive sports by females, in comparison to males, decreases more throughout adolescence (Sapp & Haubenstricker, 1978). Martino (1975) reported that many females drop out of competitive sport at an earlier age than males and before they reach their peak performance potential.

Opportunities for Girls at Younger Ages

One of the critical components in getting girls involved in sport is to reward them for their interest in sport activities. Lever (1976) reported marked gender differences among fifth graders with regard to their play behaviors. Males played more competitive games than females, with 65% of the activities reported by males classified as formal games. Only 35% of the involvement of females was in such formal activities. Within same-sex, mixed-age groups, young boys tried to play to the level of the older boys, whereas females tended to play to the level of the youngest participant. Lever also reported that the games of males lasted longer than those of the females. Several reasons may help explain this gender difference. For example, the skill of males generally is higher than that of females, so males are more challenged by the activity; the lower motor skill level of females does not keep the action exciting, even when girls play games requiring a higher level of skill; and males tend to resolve disputes quickly and continue with games, whereas females tend to break up the game when conflict arises, thereby learning little about judicial processes. The latter reason reflects clear socialization differences and social expectations. Females are taught to be peace-makers and to defuse conflict, whereas males are encouraged to "work it out." Because many females do continue in sport and do become elite performers the latter explanation is not very plausible. The issue of having sufficient skill to play a game or to compete with one's peers, male or female, appears to be the most plausible explanation.

Gender differences in motor skill performance in childhood The issue of gender differences in motor skills has received considerable research attention. With respect to the performance of motor skills, gender differences generally favor males. However, Clark and Ewing (1985) conducted a meta-analysis (a statistical procedure used to compare the results of different studies) of over 60 studies involving gender differences among children between the ages of 3 and 10. Results indicated that males outperformed females in all gross motor tasks except balance tasks. The differences were greatest for overarm throwing and kicking and were smallest for jumping, running, and catching. Thus, differences in motor skills between boys and girls emerge early in childhood and persist into adulthood.

Anatomical differences and socialization are two proposed explanations for these differences. During early childhood, boys are taller, have a greater proportion of muscle and less fat, and have longer arms and forearms than girls (Malina, 1975; Tanner, 1962). However, these differences are small. At age 5 boys are about 1 pound heavier than girls and about 2 pounds heavier by age 9 1/2. The average difference in height is 1/2 to 3/4 inches; males' arms are 3 to 4 millimeters longer and forearms 6 millimeters longer than females' (Haubenstricker & Sapp, 1980).

While anatomical differences might be a plausible explanation, it is not clear that they alone would explain the performance differences in motor skills. Branta, Painter, and Kiger (1987) report that males in our society receive more reinforcement for sport participation, are more frequently involved in organized sports, and spend more time practicing motor skills than do females. This influence of practice on performance was demonstrated in a study reported by Grimditch and Sockolov (cited in Wilmore, 1982) who asked 200 males and females aged 3 to 20 to throw a softball for distance with their nondominant hand. Not until age 10 to 12 did they find a significant gender difference in performance. Practice and learning experiences undoubtedly influence gender differences usually found in performance during childhood.

These data suggest that in order to increase the opportunities for girls in sports, it is necessary to increase the learning and practice of motor skills. Thus, early sport programs for girls and other children who may be slower in developing motor skills should emphasize teaching the basic motor skills and provide girls an opportunity to experience the joy of a good performance before placing them in a competitive arena. Girls could also benefit from learning that being better than others is not undesirable. All children could benefit from learning to appreciate good performances and improvements made in their motor skillfulness.

Parents may also need to spend more time working with and encouraging their daughters to practice motor skills. With the current interest in fitness and health, girls may see more women running, biking, swimming and engaging in other motor skills. These active role models could be a tremendous influence in teaching girls the basic motor skills at an earlier age. Many women in these health and fitness activities are competing against themselves and not against others. Therefore, it may take more encouragement from males, as well, to teach girls to enjoy the excitement of competition.

Profile of Coaches in Girls and Women's Sports

The decline in the number of female coaches in the high school and collegiate ranks is well-documented (Acosta & Carpenter, 1985; Knoppers, Ewing, Forrest, & Meyer, 1988). Prior to Title IX virtually all coaches of female teams were women, as were the officials of the games and the administrators of the programs in which girls participated. Once male and female programs were integrated under one administrative umbrella (which was generally administrated by males) however, the number of men serving as coaches, officials, and administrators increased dramatically.

By 1984 the percent of high school women coaches had declined to 17.3 % in Oregon, 33% in Washington, 43.8% in Ohio, 45% in Wisconsin, 54.6% in Virginia and 62% in Illinois (Acosta & Carpenter, 1985a; Nelson, 1984; Sisley & Capel, 1986). A similar decline, from 58.2% in 1977 to 53.8% in 1984, has been reported at the college level (Acosta & Carpenter, 1985a; Holmen & Parkhouse, 1981). In 1984 the percent of women coaching women's teams at Division I, II, and III institutions was 49.9%, 52.2%, and 58.8%, respectively, and the percent of women coaching men's teams was less than 1% (Coakley, 1986).

Profile of Coaches in Michigan In a recent study conducted within the state of Michigan, Ewing, Smith and Seefeldt (1991) reported that 35.5% of the girls' interscholastic sport teams were coached by women and 2.5% of the coaches of boys' teams were women. Girls' teams in the state of Michigan represented 45% of the total number of teams available.

Additionally, Ewing et al. (1991) found that over 90% of the coaches of girls' teams in Michigan are Caucasian. When combined with the high percentage of male coaches, it is a rather clear message that sport is controlled by Caucasian males. It would be difficult for minorities to see sport as an accessible achievement arena, except as a player. Six percent of the boys' teams were coached by a minority coach. A complete breakdown of the ethnicity of coaches of girls' and boys' interscholastic teachers can be seen in Tables 28 and 29. The ethnicity and gender profiles of the athletic directors who completed the questionnaires for their high schools were also those of Caucasian males (approximately 97%).

According to Mathes (1983) the decline in the number of women coaches means there are fewer visible role models for women in sport, which could have a detrimental effect on female athletes. She contended that teachers and coaches strongly influence the values, achievement level, productivity and career orientation of same-sex athletes and students. Thus, female coaches serve a function for female athletes that goes beyond the technical aspects of coaching.

Although young girls see female role models in a variety of male dominated occupations, a lack of female coaches could be especially detrimental. The high value placed on sport in the United States give coaches an aura of power, prestige and status, as well as visibility as decision makers (Miller Lite Report, 1983; Sage, 1975). The absence of women from such positions may reinforce the gender stereotyping traditionally associated with the sports world and women in general. A major concern among high school athletic directors is the declining number of teachers in the district who are willing to coach. A part of this problem is that, as the overall age of a district's faculty increases, there is less interest among teachers in continuing as coaches. Related to the age issue is the low pay associated with coaching. Ewing et al. (1991) found that for the girls' teams approximately 30% of the coaches were non-teachers. Indeed, of the total sample of coaches of girls' teams, 13.6% were non-teachers and non-certified as coaches. Of the non-certified, non-teacher coaches, 36% were females and 64% were males, which suggests that either males are more willing to apply without the traditional qualifications or that the majority of male athletic directors are more likely to find males who are willing to coach.

The issue of minority coaches as role models looms as a major issue facing sport organizations today. The very small percentage of minority coaches found in the high schools in Michigan is troubling. Athletic directors indicated several barriers to hiring female and male minority coaches. One of the main barriers was a lack of applicants. This was particularly true for the suburban communities. Other barriers included lack of knowledge of the sport, lack of qualifications, and time and availability. Many of these same barriers were reported in hiring women (Ewing, et al., 1991).

These comments mirror those of athletic directors at the collegiate level. It is particularly distressing to hear individuals, such as Mickey King Hogue, women's athletic director at the Air Force Academy, argue that she would like to hire more women head coaches for the women's teams at the Academy, but she will always select the most qualified person, and currently, those individuals are males (Hogue, 1985). These comments are troublesome because it appears that female administrators are applying a male definition to the issue of qualification. Knoppers, Ewing, Forrest, and Meyer (1988) found that female coaches at NCAA Division I schools were more qualified in terms of years of experience, experience as an athlete in their sport, and in educational degrees. A similar finding was reported for female coaches at the interscholastic level (Hasbrook, Hart, & Mathes, 1989). The excuse of lack of qualifications by females who wish to coach appears to be another method employed by administrators to devalue the participation of females in sport.

Table 28

Percentage of male and female coaches of girls' and boys' teams in Michigan high schools, 1990-91.

Coaches	Number	Females		Males	
		N	%	N	%
Girls' Sport Teams	4,943	1,755	35.5	3,094	62.6
Boys' Sport Teams	6,113	150	2.5	5,872	96.1

Table 29

Percentage of coaches of girls' and boys' high school teams in Michigan by ethnicity, 1990-91.

Ethnicity	Girls' Sports		Boys' Sports	
	N	%	N	%
Asian American	34	0.68	16	0.26
African American	255	5.10	317	5.20
Caucasian	4,468	90.40	5,608	91.70
Hispanic	23	0.47	31	0.51
Native American	3	0.06	4	0.07
Other	11	0.23	8	0.13
Total Minority Coaches	326	6.60	376	6.20

Source: Ewing, Smith, & Seefeldt, 1991.

Coakley (1990) suggested that when men's and women's sport programs were merged, men who moved into the power positions and control of the women's programs were anxious to hire people who thought as they did, coached as they would coach, and those who would see their leadership as legitimate. Thus, male athletic directors were more likely to view males as more "qualified" because they understood the male-dominated sport structure. Women would be viewed as "unqualified" because they did not "do sport things" as men did them. Some of the differences might be less emphasis on winning and greater emphasis on teaching sport skills and strategies, not pushing the girls hard enough to become better, and getting too close to the girls on the teams. Given Coakley's argument, it is not difficult to understand why Caucasian men have been more "qualified" to do sport coaching and administration and why women have either been defined as unqualified or have not bothered to apply for jobs that do not fit with the reasons for which they chose sport as a career.

The problem is not limited to athletic directors, however. Many athletes of both sexes are likely to perceive men as more competent than women in coaching roles, even when the records and credentials of the men and women coaches are basically the same. Many women who enjoy coaching have expressed concern with this pervasive attitude and have considered dropping out of coaching to relieve the stress of constantly proving themselves as capable, competent coaches only to have their male counterparts attribute their success to luck and, again, devalue their accomplishments.

Debunking the Myths of Girls and Women in Sports

How do we begin to change the practice of devaluing the participation of girls and women in sport? The approach to debunking any myth begins with education. However, with respect to the issue of girls and women in sport, it is necessary to educate on several fronts. Specifically, parents, physical education teachers, youth sport coaches, researchers and sport policy makers must be involved in the process of debunking the myths. The underlying assumption must be that sport performance is neither male nor female specific. To apply this assumption to all groups would suggest that sport must now be viewed as a basic human activity. Performance of sport skills ranges on one continuum from "unable to perform" the skill due to lack of instruction, practice or experience to "most outstanding" (i.e., most elite performer at this point in time). The comparison group on this continuum is one's last performance. Over time, it should become acceptable to reward good performance for males, females, overweight children, handicapped children, as well as master sports competitors.

Initially, it is critical that parents, who are the primary socializers of children prior to the school years, understand that skill patterns emerge during the early childhood years (ages 2 1/2 to 5 1/2). These patterns undergo progressive qualitative changes that lead to mature and efficient movement patterns. These changes are sequential, orderly and similar for most individuals (Ulrich, 1987). During the early childhood years competence in performing motor skills such as throwing, catching, kicking, jumping, hopping, galloping and skipping begins to develop. By age 6 children may use these skills to create games. The response of parents is often quite different to boys and girls as these skills are developing. Fagot (1978) reported that parents react significantly more favorably to their offspring when they perform a gender-stereotyped behavior. Additionally, Fagot found parents more likely to react negatively to their daughters when they engaged in active, large motor activities and positively to their daughters exhibiting adult-oriented, dependent behaviors.

To continue the process of valuing female participation in sport, it is necessary to encourage girls to consider other sport roles. Girls should be asked to assist as coaches of youth sports teams (as boys often are) in order to provide encouragement for girls to consider coaching as a viable career. Boys and girls must both see coaching as a viable career activity. Boys may think about coaching when they complete high school, while girls may not often consider a coaching career unless they are majoring in physical education or a related sport curriculum.

It is also critical during the teenage years that a clear message be sent to girls that being an athlete is desirable. The suggestions and cruel remarks that are often made about girls who enjoy an active lifestyle must stop, e.g., "you play like a boy". Being active is not synonymous with masculinity, nor is being a member of a girl's sport team indicative of sexual orientation. As society redefines women's roles and changes its expectations for women, there is a need to ensure total equity in the availability of all positive developmental experiences, including sports participation during childhood and adolescence.

School systems should be encouraged to provide daily physical education classes for all students, wherein instruction in sport skills and fitness concepts are emphasized. Likewise, community recreation programs, and sport-governing bodies should insist that all youth sport coaches be certified as a minimum requirement for working with our youth. All sport programs should emphasize skills of social development as well as physical skills. Being healthy, fit and skilled are desirable characteristics for boys and girls.

Summary and Conclusions

Participation in sport has increased dramatically over the past 30 years. Among the reasons for this increase are more agencies offering sport opportunities; new sports, such as soccer, being introduced to youth; and the increase in the number of girls who are becoming involved in sport programs as a result of Title IX. The latter reason may be the most significant. Initially, girls' school-sponsored sports programs were organized, coached and officiated by females. Unfortunately, as girls' sports grew in acceptance by the public, males found coaching girls' teams to be another employment opportunity. Over the past 20 years the pattern of participation for girls has increased, while the number of female coaches, officials and administrators has declined at an alarming rate. It is hypothesized that administrators still view sport as an arena for male achievements and because of this view males are viewed as being better qualified to coach. In addition, socialization practices of parents, youth sport coaches and community youth sport organizers continue to favor and promote male involvement in sport while deemphasizing the importance of skill development or discouraging female involvement in sport altogether. Greater emphasis must be placed on teaching sport skills to both girls and boys by qualified teachers/coaches. Well-intentioned volunteers who have little skill or knowledge in the sport are often ineffective in teaching the correct mechanics of sport skills or to improving the skills and knowledge of the youth players. Learning sport skills and improving one's sport skills are two of the most important reasons that youth have for participating in sport. Failing to meet the goal of skill development can discourage youth from developing a healthy attitude toward an active lifestyle.

Sport programs must address the social development of youth as well as the physical development of skills. Sport participation provides opportunities to learn about individual and cultural differences, to accept teammates who are less-skilled, and to change attitudes about girls' and handicapped individual's rights to participate. For sport participation to be effective in debunking myths about females' and other groups' ability to participate in sport, sport administrators must accept an inclusive philosophy of sport.

Effectiveness of Sports Programs for Adolescents

The effectiveness of sports programs for adolescents is an area that few researchers have investigated. As was indicated in the section on patterns of participation, teenagers are involved in sport largely for intrinsic reasons (i.e., to have fun, to learn skills, to improve fitness, and to enjoy competition). However, the reasons that adolescents gave for dropping out of sport were primarily external, e.g., coaches, needed more time to study and to do other things. If one is to assess the effectiveness of a sports programs, the primary objective of the evaluation should be the impact of the program on the participant. Unfortunately, the primary criterion in most sport programs is the win-loss record of the coach.

During adolescence, youth are experiencing many physiological, cognitive, social and behavioral changes that impact their self-perceptions. When faced with understanding self in an achievement arena, the complexity of the teenager becomes apparent. Effective sport programs are those that provide the teenager with the opportunity to grow in their understanding and appreciation of self. Thus, a program that provides for the teenager's improved self-esteem would fit the overarching definition of effective.

Pittman (1991) argued that the development of competencies is directly related to youth development. Further, the development of competencies is directly related to youth participation in adult society. Pittman noted that all young people will find ways, either socially acceptable or socially unacceptable, to build the competencies that are needed to participated successfully in adolescent and adult life. Demonstrating these competencies to others results in youth who feel self-gratified and self-empowered. The process of developing competencies in many domains (e.g., health/physical, personal/social, cognitive/creative, vocational, citizenship) is an ongoing process that is critical if adolescents are to become productive adults. Youth who are not provided an opportunity to develop competencies either because of early withdrawal from school and/or a lack of sport programs, or because of a lack of opportunities within their community become at-risk. Youth who can demonstrate their competencies in an achievement arena, such as sport, will perceive themselves positively and feel good about themselves, i.e., experience improved or positive self-esteem.

Harter (1990) posited that self-esteem is multi-faceted and involves the discrepancy between adolescents' perceptions of competence across domains (i.e., scholastic, athletic, social acceptance, physical appearance, and behavioral conduct) and the importance they attach to success in these domains. Associated with self-perception of competence in these achievement arenas is the adolescents' perceptions of the attitudes of significant others toward the self. Thus, the coach, parent, and peer are all part of the significant influences on teenagers' development of competencies and subsequent self-esteem.

To be deemed effective, sport programs should enhance a teenager's self-perception of competence through the effective leadership of the coach in the areas of skill development, social interactions with peers, improved physical appearance, habituation of life-long health enhancing behaviors plus the support (not evaluation) of parents and/or significant adults. Characteristics of programs that provide opportunities for teenagers to enhance their self-esteem will be discussed later in this section.

Types of Sports Programs Available to Adolescents

The types of programs available to adolescents are limited by the resources of the communities. Most suburban communities provide an array of sport opportunities both within the school and the community. Urban and rural communities provide more opportunities through the school than through community programs.

"Pay for play" programs One of the distressing occurrences in smaller communities and those inhabited by families with low incomes is the dependence on "pay for play" as a way to support agency-sponsored and interscholastic sports programs. This trend decreases the opportunities that are available to children and youth who are already deprived of the facilities and programs that are commonplace in most suburban communities. An extension of this reliance on direct revenues from program participants for eligibility to sports programs will result in the exclusion of most urban dwellers from organized sports during childhood and adolescence.

Usurping of facilities by adults An increase in the number of adults who participate in recreational sports, combined with the demand to pay for such services has reduced the facilities and programs that were once devoted to sports for children and youth. As directors of programs are forced to seek extramural funding to support their offerings it becomes more difficult to find advocates for youth sports, especially if such advocacy must be accompanied by personal funds. Thus, programs and facilities that were once dedicated to youth are increasingly devoted to adult participants.

Educational sport programs In addition to the agency-sponsored and school-sponsored programs available to youth, there are also programs that stress education in conjunction with teaching sports skills. Unfortunately, these programs are offered mainly to younger children. For example, the NCAA has designated funds for a National Youth Sports Camp, which is provided primarily for at-risk youth. Dixie Baseball has established a model program for disadvantaged youth in an inner city. Summer sport schools are available at many colleges and universities, as well as at the community level, private clubs, and sport camps. Indeed, the array of programs available underscores the importance of sport in American culture. Moreover, in the absence of adult-organized opportunities, youth report that they participate in pick-up games or games that they organize for themselves without adult supervision.

Characteristics of Effective Programs

Although there are many kinds of programs available to young athletes, the effectiveness of many of these programs is unknown. Based on a synthesis of the research, the reasons for dropping out of sport programs and the changes that youth would make to sport programs to stay involved, there are common themes that emerge which provide some insight into how an effective program would be organized.

Quality of adult leadership One of the most critical factors in sport programs is the quality of the adult leadership. To be effective, adults must be knowledgeable about their sport, be effective teachers, and understand the youth on their team. This means that volunteer coaches need education about how to teach sport skills and, equally important, coaches need to understand youth from cultures other than their own. Unfortunately, being a parent does not mean that one understands youth from one's own culture or even understands one's own child! When working with youth at-risk, there is growing evidence that being a caring individual who responds to more than a child's physical needs is a prime ingredient in keeping an at-risk youth involved in school programs (e.g., Lifka, 1990). In addition, high school teachers/coaches need a greater understanding of diverse cultures and the impact of the culture on the youths' perceptions of achievement.

Focus on instruction A second criterion for effective sport programs is that sport programs should focus on instruction. If a game must be stopped to instruct players on what should be done in a situation and why, then this instructional opportunity should not be missed. If the game score is too one-sided, coaches should redivide the players so that the participants have a challenge that is enjoyable. This is particularly important for younger youth who have clearly stated that fun involves playing against someone of equal ability (Harris, 1991). Emphasizing outcome, i.e., winning and losing, does not allow youth the opportunity to learn that effort, practice, setting new goals, and accepting responsibility for one's successes and failures (a form of empowerment) is what will lead to success in an achievement arena. In some respects this may be viewed as preparation for life, although this is not the view that is observed and understood by many young people or by their parents and coaches.

Enhancement of self-esteem A third criterion for all sport programs is the enhancement of each youth's self-esteem. As mentioned in the introduction of this section, and several times throughout this chapter, the development of a person's self-esteem is a critical component to continuing involvement in an achievement arena. If a person's self-esteem is decreased through negative comments from peers, coaches, fans, or parents, a person will lose motivation to work harder. Also, a program's philosophy can create an environment that enhances the self-esteem of only those participants who have highly developed skills or competencies, high self-confidence and a strong social support system (usually parents).

Emphasis on academics and athletics For all sport programs, a final criterion should be added to the list. Specifically, success in the classroom should be emphasized as much as success in athletics. As the Women's Sports Foundation (1989) reported, minority students (boys and girls) who were involved in athletics were less likely to drop out of school, got better grades, and were more socially involved in school activities than their minority counterparts.

It is clear that sport is not an avenue for upward mobility for most at-risk youth. The data are also clear that sport is not a viable achievement arena for most youth beyond the high school level. The percentage of youth who progress from high school to college sports is less than 4% (Coakley, 1990). The percentage of 4th year college athletes who become pro rookies was 1%. Among the 3582 professional athletes in 1988 who participated in football, baseball, hockey, basketball, men's and women's golf, men's and women's tennis and auto racing, Coakley reported that 11 (.3%) were Asian and Pacific Islanders, 3 (.03%) were Native American, 150 (4%) were Hispanic American, 1159 (32%) were African American and 2259 (63%) were Caucasian. For women, the mobility opportunity is even more limited than for men. Coakley (1990) reported that among the 176 tennis and golf professional women there were 6 women of color. Although youth continue to strive for these lofty competitive opportunities, they should know the odds they face so they can pursue other, more realistic alternatives while they play sports. When the goal of becoming a professional athlete interferes with educational achievement, sport participation often becomes linked with downward social mobility.

Sport participation has often not been successful in preparing gifted athletes for the realities of a sport career or life after sport. The careers of most professional athletes average 3 to 5 years. The media may distort the reality of the length of sport careers because the best athletes in the most popular sports tend to have longer playing careers. These same athletes will often be seen in sportscasting following retirement. Youth are often unaware of the preparation that occurred prior to the new career. Rather, sportscasting is viewed as a logical extension of one's sport career. Preparation for other sport-related careers, such as coaching, officiating, sport medicine, sport management, and athletic training are seldom mentioned to athletes as alternative careers. Athletes need to be aware that career alternatives require skills in interpersonal relations, a good education, an in-depth knowledge of how sport is organized and administered, and some connections with people who can provide recommendations and career opportunities. Education is the key, and sport and academic achievement arenas should be close allies in their concern for the development of young people.

Examples of Exemplary or Model Programs

Based on the criteria cited above, the examples of exemplary programs became very limited. However, programs do exist that meet several of the criteria. These will be presented and discussed below.

Dixie Baseball Incorporated Dixie Baseball Incorporated is an organization which provides administrative oversight and governance of youth baseball and softball for approximately 320,000 children in 11 southern U.S. states. Although local communities with Dixie Baseball leagues generally charge a fee for participation, no child is excluded from play on the basis of an inability to pay. Dixie Baseball's stated philosophy is based upon maximum participation of children, both in terms of access to the program and in their requirement that each child be allowed to play in every game. In 1965 Dixie Baseball received a grant from Major League Baseball with which to establish a program targeting poor, primarily African American, youth in Chattanooga, Tennessee. These are children who would not otherwise have the resources necessary to participate in organized league baseball. The grants are used to help cover facilities, equipment, insurance and administrative costs for locally operated programs. Initially the funds were used to form 4 baseball leagues. In recent years, the program has flourished to the point where 2 of these leagues have organized local fundraising efforts, become financially self-sufficient and are now independent of the grant funds. No specific evaluations of the effectiveness of these programs on the individual development of youth have been conducted. It seems reasonable to conclude, however, that these largely at-risk children have benefited from the addition of a structured achievement arena, with widespread community interest and adult leadership.

Coach effectiveness training program Another program that has demonstrated characteristics of a model program is the District 8 Little League Baseball program in

Seattle, Washington. Under the direction of Frank Smoll and Ronald Smith, the program adopted an educational program for youth sport coaches, i.e., Coach Effectiveness Training (CET). The program, which is grounded in sport psychology, is designed to help coaches increase the value of sport participation for youth's personal, social and skill development. Specifically, the CET program consists of a series of behavioral guidelines that are based on the conception of success or "winning" as giving maximum effort, and social influence techniques that involve principles of positive control, rather than aversive control. The behavioral guidelines emphasize the desirability of increasing reinforcement, encouragement, and sound technical skill instruction. Coaches are urged to decrease punishment and criticism, as well as to avoid having to use regimenting behaviors by establishing team rules early and reinforcing compliance with them. The guidelines are placed in a goal context of increasing positive coach-athlete interactions, developing team cohesion, and developing in athletes a positive desire to achieve rather than a fear of failure.

The program effectiveness was tested through a controlled field study. The results of the study, based on player interviews and questionnaires, were that youngsters who played for CET coaches perceived their coaches as more frequently engaging in desirable behaviors (i.e., reinforcement, encouragement, and technical instruction) and as less often being unresponsive or punitive. These behavioral differences were, in turn, reflected in the players' attitudes. Although the average win-loss percentages of the two groups of coaches (CET and control) did not differ, the CET coaches were better liked and were rated as better teachers. Additionally, players on the CET teams liked one another more and indicated that they had more fun playing baseball. Perhaps the most encouraging fact was that children with low self-esteem who played for the CET coaches exhibited a significant increase in general self-esteem over the course of the season, whereas children with low self-esteem who played for the untrained control coaches did not change. The most impressive finding from the study was the fact that 95% of the children who played for the CET coaches returned the following season whereas only 74% of the children who played for the coaches who did not receive the special educational program returned.

Physical Education At-risk Youth Program Two professors at the University of Illinois - Chicago have been particularly effective in changing interpersonal behaviors of youth, although the evidence of their program's impact on dropping out of school is not yet available. Hellison (1990a, 1990b) noted that Chicago is a unique city in which to work with youth at-risk, because 2 out of 3 youth in the public schools come from families below the poverty line, half of the students drop out of school, and only 8 percent of the African American and Hispanic American ninth graders read at or above the national average. Chicago has been identified as the most segregated city in the United States. Hellison and his colleagues at the University of Illinois - Chicago have devised and implemented a program to serve the disadvantaged and at-risk children and youth in Chicago. The Physical Education At-Risk Youth Program has been implemented in a variety of settings including an inner-city high school, an alternative school, two housing projects, a residential boys' home and an after-school dropout prevention program.

Hellison (1990a) described the program as a holistic education experience which emphasizes people and human values, rather than winning, and which offers a broad conceptualization of health education, emphasizing social, emotional, and spiritual health alongside of physical health. Hellison conceptualized the program as having four progressive and cumulative goals. Each level refers not only to observable behaviors but underlying intentions and values. The four levels are (1) sufficient self-control to respect the rights and feelings of others, (2) participation and effort in program activities, (3) self-direction with emphasis on independence and goal setting, and (4) caring about and helping others. In this program, sport and exercise provided the highly interactive and emotional environment for implementing the goals.

Evidence that the Physical Education At-Risk Youth Program is altering behavior is not overwhelming, but as noted by Hellison (1990a) the political, economic, and education problems of low-income minority neighborhoods are formidable barriers to program success. In addition, Hellison reported a low attendance at the schools which makes assessment of the program's worth extremely difficult. This program is noteworthy and has reported some successes in the self-control of its students, increased participation in school activities and independent goal setting by the students(Hellison, 1990b; Giorgiadis, 1990). However, given its mere three years of existence, more time is needed to determine its worth.

Cincinnati Academy of Physical Education Program Somewhat of an alternative to the approach of independent self-reliance described above is the highly regimented Cincinnati Academy of Physical Education (CAPE) program. The goal of CAPE is to graduate students who are literate, health-conscious and socially aware. The program incorporates teaching youth how to learn to make informed decisions. The program objectives are to promote school racial integration, to develop a sound mind in a sound body and to promote academic excellence. The objectives are reached by developing a small teacher - to - student ratio to meet the individual needs of the student, developing a structured physical education program with opportunities for individually prescribed programs for each student, offering a variety of intramural sports, club activities, interscholastic sports, and programs in the arts and music areas, and providing a wide range of high interest, short duration experiences. The program has grown from 56 students in 1977 to 1000 in 1991. In addition to participation in increased sport opportunities (daily PE classes of 45 minutes to 1 hour), the students must meet more stringent academic and graduation requirements for athletic participation (Murphy, 1987). Again, empirical evidence is missing but the self-report information is encouraging.

Hawaii Youth Sports and Physical Fitness Program The Hawaii Youth Sports and Physical Fitness Program was established in 1989 by the State Legislature of Hawaii for the expressed purpose of providing leadership for the promotion of youth sports and the elevation of youth fitness in the Hawaiian Islands. The program is administered by personnel of the Department of Physical Education and Recreation, College of Education, University of Hawaii. To date the program has educated approximately 6000 coaches, who then recruit children and youth into organized sports activities. Approximately 50 percent of the children served by the program come from low socioeconomic areas where local monies must be recruited to build facilities, buy equipment and solicit volunteers to assist with the implementation of the programs. Additionally, the program's directors conduct assessments of physical fitness, inform parents and young athletes about proper nutrition and counsel against the use of drugs. Although the effects of this program are not scientifically documented, the evaluations obtained by the program administrators as a result of visits to local communities are highly positive.

Special Considerations in Sport Programs for Adolescents at Risk

One of the prime ingredients in all the exemplary programs is the caring nature of the teacher/coach. The process for caring among coaches involves departing from the concept of winning as the most important goal and including a greater emphasis on social development. This means that coaches must be sensitive to the attitudes, values and language of their athletes. Thus, coaching education is an essential ingredient because most coaches learned their coaching techniques from their coaches and the traditional approaches are not likely to be effective when teaching adolescents at-risk.

Additional effort must also be placed on hiring minority and majority women and minority males as coaches. Not only is this important in the context of efforts to achieve equal employment opportunity, it is necessary to provide role models of career alternatives for boys and girls beyond those currently visible.

In addition, the recruitment of peer coaches, a technique that has been used successfully in academic settings, should be employed. Experiential evidence supports the effectiveness of peers as teachers and role models in other teaching-learning situations. Sports should provide an equally suitable environment.

The shortage of qualified coaches extends to every age level in every sport that is sponsored by adults for children and youth. Inherent in this dilemma is the practice of recruiting coaches from the ranks of parents whose children participate in the program. An alternative approach is to set minimum standards of understanding and competence that can be met by attending classes for the specific purpose of providing the needed information. Although these techniques have been tried to a limited degree, there has not been sufficient recognition or rewards for those who have completed the prescribed programs. The Red Cross Life Saving Program is one example of a teaching/coaching program that has maintained standards over the years while concurrently providing qualified coaches to youth swimming programs.

Greater emphasis should be placed on academic success for athletes. Sport cannot continue to be viewed as "the best way out of the ghetto." Career alternatives in sport and other areas must be given to athletes, along with the realistic projections of being able to extend one's athletic experience to the professional sport level.

Finally, researchers must leave their campuses and learn more about at-risk populations. We cannot assume that we can make a difference by merely educating coaches. We must work with at-risk people directly in order to understand their needs, values, attitudes and culture. The prospect of using sports programs for youth as a fertile area in which to teach responsible citizenship provides possibilities for collaboration between educators, psychologists, researchers, the federal government and corporate sponsors.

The problems of adolescents at-risk, if unresolved, threaten the existence of formal education and community life in urban America. The challenge now is to identify strategies that are effective in changing unacceptable behavior and then finding ways to implement programs through which desirable actions can be initiated, assessed, supported, and rewarded.

Administrators of youth sports programs have historically gone beyond the call of duty in their outreach to children in need. However, the next generation will challenge that commitment as never before. The current challenge extends beyond the auspices of administrators who conduct youth sports programs; it extends to all who are interested in the future of young Americans. Although youth sports are but one way to reach youth at-risk, sports appear to hold the greatest potential for reaching a specific segment of this population. Expediting this potential calls for a three-step process: (1) assessing the feasibility of the recommendations made in the last section of this overview; (2) identifying one or more strategies to be implemented in specific settings; and (3) meeting with decisionmakers of the various support groups to plan the program design, implementation and assessment of an intervention program.

Summary and Conclusions

Most people who have participated in sport have indicated that one of their goals is to develop sport skills or competencies. As youth develop the skill necessary to meet new challenges, their self-esteem increases. There are many other competencies that can accompany sport involvement. New sport programs and physical education programs have focused on developing physical, cognitive and social skills. These programs have been effective because they have placed special emphases on developing more than just physical competence.

Coaching education programs which focus on more than sport skills and strategies have been the most effective mechanism for effecting change. The success of coaches must be measured by multiple criteria, not just the win-loss record. Many of the coaches' education programs have resulted from attempts to bridge the gap between research and coaching/teaching practices. However, because evidence of effectiveness is largely experiential, sytematic efforts to study the impact of these programs are needed.

Conclusions

Athletic competition is a pervasive factor in the school and non-school activities of adolescents. An estimated 35 million children and youth between the ages of 6 and 18 participate in one or more organized sports, annually. Youth sports, as they are conducted today, grew out of a void in the leisure time provisions for children and adolescents after World War II. The trend in youth sports during the past forty years has been toward expanded opportunities for participation, a proliferation of competitive opportunities that currently includes all sports, lengthened sport seasons to include year-around competition and extension of opportunities for competition to young children.

The characteristics of local sport offerings have also changed markedly since 1950. Many of the local programs are now affiliated with national governing agencies, thus providing opportunities for district, regional and national levels of competition in nearly all sports. All administrative units seem to be aware of their responsibilities to provide equal opportunities for boys and girls, as reflected by the types of programs that are available on the local and national level. Although true equality is not a reality, progress has been made to achieve this goal. In the meantime, participation rates for boys in both school and non-school sponsored sports continue to be much higher than those for girls. Conspicuously absent in the missions, goals and objectives of many national governing agencies was a commitment to provide programs for specific populations such as low income and minority groups.

The potential benefits of sports competition are acknowledged by parents, educators and physicians, but whether these benefits are actually derived by a significant number of participants depends largely on the quality of adult leadership associated with the program. Included in the potential benefits are learning of physical skills, developing an appreciation for the discipline required to achieve the mental and physical fitness necessary for competition, a sense of belonging to a group other than one's own family, an opportunity to enhance one's social development and the acquisition of useful skills for leisure.

Competitive sports also have the potential to produce negative effects. Foremost among these is the disintegration of moral development that is often associated with, and condoned as part of, the win-at-all-costs philosophy. Assessments of excellence that measure competence only in relationship to winning are another questionable derivative of sports competition. Thirdly, the influence of competition on motivation to achieve desirable outcomes may have negative consequences depending on the time at which competition is introduced in the learning process.

The prospect of deriving negative as well as positive results from participation in competitive sports provides a compelling argument for the education of qualified adult leaders. Two national associations and four independent organizations have answered the call by either providing guidelines for coaching education programs or developing model programs. These model programs have been adopted and implemented by some national sport governing agencies.

A major limiting factor to achieving the potential benefits of participation in youth sports is the ever-present specter of injuries. At the present time none of the national governing agencies maintains a data base on injuries, nor is there clear evidence that they understand the epidemiology of injuries which is necessary to make wise decisions about rule and equipment modifications for the purpose of alleviating or reducing the incidence and severity of injuries. Sponsoring agencies need valid data on the occurrence of injuries and the conditions that may have contributed to the problem before sound decisions about changes can be made.

Data on rates of participation and attrition in school and non-school sports suggest that boys and girls are more similar than different in their reasons for joining and dropping out of sports. Both genders participate to have fun, to improve their skills, to stay in shape, to be part of a team and for the challenge of competition. Boys and girls drop out of sports when their objectives are not being realized. Dropouts of both genders object to the way they are treated by some coaches, the time that the sport demands of them and the way the practices and games are conducted.

Gender equity continues to be a problem in sports, especially in non-school programs. Boys become involved at younger ages and drop out less frequently than girls. Skill levels of boys in all components except balance are higher than those of girls, making co-ed competition an unlikely prospect, even at the younger ages. The plight of girls in sports is compounded by the lack of a sufficient number of female coaches as role models. The steady decline in the percent of women coaches at the high school and college levels decreases the possibility that girls will share equally in school and non-school sports in the future.

The possibility of using sports as an avenue to promote healthy development among adolescents living in high-risk environments is an attractive prospect only if the adults who conduct the programs attempt to understand the factors involved in youth's engagement in problem behaviors. A caring attitude and a commitment to instruction in physical skills, personal-social relationships and moral values as well as to competitive outcomes seems to be prerequisite to changing such behavior. In addition, both community and school-based programs must emphasize the importance of academic achievement as a condition of participation. The enhancement of self-esteem through the achievement of attainable goals is the ultimate criterion of successful programs when using sports as a strategy of intervention with youth at-risk.

In summary, the research and experiential evidence pertaining to youth sports indicates that many of its potential benefits are available to only a highly selected group of participants. If the benefits of sport are to be expanded to include those of modest skill and of low socioeconomic status, some major changes must be undertaken. Leaders at the local and national levels must commit to programs that emphasize inclusion of those who currently have the greatest need for sport, but for whom access is denied, because of skill level, ethnicity, race, gender, ethnicity, geographical location and socioeconomic status.

Recommendations

Organization of Sports Programs

1. Sport programs, both school and non-school sponsored, must engage in a **systematic and critical evaluation of their goals, objectives, and the efforts of the coaches representing their programs** to assure that the educational component is being addressed effectively.

   * School-sponsored sport programs must achieve a better balance between their educational and athletic goals. As with all extracurricular activities, participation should be a part of the educational experience. With males particularly, the lure of a professional sport career is often much stronger than the desire for a high school education. The value of an education must be taught as well as the value of winning.

2. Sports programs must ensure that **responsible citizenship** and **academic achievement** are emphasized as goals and objectives. Those organizations that currently seek only the promotion of elite status for their participants should consider enriching their programs through the incorporation of outcomes that have greater immediate and long-term value.

   * It is unrealistic to expect sport programs to solve all of the problems of teenagers at-risk. However, participation in well-organized sport programs and/or physical education classes that **focus on developing good interpersonal skills, learning to cooperate in order to have a game, improving physical skills and physical fitness, learning discipline and respect for rules, and enhancing self-esteem** can provide youth with some of the skills necessary for acquiring a job or going to college.

- Because they may perceive sport as one of a few arenas for a career and may feel more pressure to succed in sport, **at-risk youth must be continually reminded by parents, coaches and administrators of their chances for success as career athletes and be encouraged to complete an education in order to seek realistic career possibilities.**

3. **Sport programs must de-emphasize winning and elitism** if these occur at the expense of skill development and acceptable personal-social behavior. The practice of winning at all costs sends the wrong message to the majority of youth, particularly low skilled individuals.

4. Communities must ensure that there are **opportunities for athletes of all skill levels and at all ages**, especially after age 12. In research studies, athletes frequently stated that communities failed to provide opportunities for other than elite players after 12 years of age.

   - Age groupings in community-based program **should be no greater than two years**, with the provision that highly skilled players within these groups could move to the next highest age level and those who cannot possibly be successful at their specific age level could be moved to the next lowest age level.

   - Adults who promote and sponsor community-level sports for youth must ensure that they **provide several levels of play at all age groups**, whenever possible, so that the highly skilled athletes within an age category do not dominate the opportunities for skill development.

5. Many children appear to be excluded from sport because of economic reasons. Community leaders must **ensure that there are opportunities for sports participation available within walking distance of the children's home.** In addition, when the sport requires special equipment it should be provided by the sponsoring organization.

- Pay- for- play programs **should provide scholarships which are awarded discreetly** to children financially unable to participate.

6. **Communities must work to expand the variety of sport opportunities offered** with a view to providing non-traditional sports programs to those historically deprived of such opportunities.

    - In addition to being more actively recruited into existing sport programs, **females must be encouraged and feel comfortable in trying sports in which they have not traditionally participated.**

    - **Communities must offer an expanded variety of sport programs** beyond those traditionally available so that youth from all ethnic backgrounds feel welcome and accepted.

7. **Programs should be organized such that the voices of children are included** in evaluations and decision making.

    - Aversion to rough play by both girls and boys suggests that **rules in sports such as soccer, softball, baseball, football and ice hockey should be modified** so that those who wish to play the sport without body contact will have a greater possibility of becoming involved. "Rough play" is also interpreted as highly aggressive, competitive play.

    - The views of younger athletes should be accomodated in the form of **less competitive and more instructional opportunities.**

8. The synthesis of data on sport-related injuries suggests that the incidence is unacceptably high. This finding suggests that the **national governing agencies must acquire the epidemiological evidence that will permit them to implement changes in rules, equipment and personnel, with a view toward reducing the incidence of avoidable injuries.**

9. Youth sport agencies **should prepare a videotape addressing the role of sport in children's lives**. This tape would address reasons for participating, impact of parental expectations, how to be an effective, supportive parent, and how to mix parenting and volunteer coaching roles.

10. Scientists who are interested in youth sports **should conduct research concerning the involvement of African American, Hispanic American, Asian American, Native American, and other racial groups involved in sport**. What do these young people want and need in community programs? How should these programs be organized? How can we involve more minority youth (particularly females) in non-school sport programs?

11. National youth sport governing agencies must insist that local communities which identify with their organizations be required to **demonstrate acceptable standards of program quality as conditions for membership.**

Scheduling of Practices and Games

12. As participation in sports increases among the youth and adults, opportunities for participation will decrease as community and agency-sponsored youth and adult sport groups, youth and adult sport clubs, school-sponsored sport teams, masters' sport groups and individual recreational participants compete for limited space and facilities. In order to accommodate these groups of individuals, the **communities, agencies, clubs, and schools who provide sport and/or recreational opportunities must work closely together to coordinate programs and to eliminate competing programs**. If coordination does not occur, then the reduced space and facilities will result in pay-for-play programs. In such an environment, low socioeconomic groups, women and minorities will lose additional opportunities for sport and fitness.

13. **Less time per week, month and season should be devoted to practices and games**. Athletes of all ages mentioned the time required for sports as a major impediment to doing other things and as a primary reason for discontinuing their participation in sport.

14. **Greater attention should be given to effective and efficient organization of practices**. Athletes complained that the practices were too long and boring. Short practices with ample opportunity for each athlete to become involved in skill development is likely to eliminate this criticism.

Quality of Adult Leadership

15. Estimates suggest that less than ten percent of volunteer youth sport coaches and an even smaller percent of non-faculty interscholastic coaches have participated in classes designed to enhance the competencies of beginning level coaches. This situation will not change unless inducements or incentives to acquire additional education are available through national or state governing agencies. **All coaches should be mandated to acquire the skills that meet the standards proposed in Coaching Certification** (Appendix C) and **Guidelines for Coaching Education** (Appendix B). **Administrators and middle managers of youth sports programs must be conversant with these Standards and Guidelines and insist on their implementation.**

16. **Sports programs that seek to attract and retain adolescents must ensure that coaches incorporate** the components that adolescents regard as essential to their participation; namely, **enjoyment, skill improvement, teamwork, cooperation, fitness, social development** and the **enjoyment of competition into their practices and games**. These components represent essential ingredients if sports programs expect to meet the needs of a diverse population and to assist teenagers in developing positive self-esteem.

17. The one pervasive ingredient of youth sports which seems most often implicated in its dilemmas, and yet is most susceptible to change, is the quality of adult leadership. Specifically, the **performance of coaches should reflect the following needs of children and youth:**

   * **Greater opportunities for all team members** to participate in a meaningful way in practices and games. All of the objectives listed by the participants referred to active involvement in practices and games.

   * **More attention to learning about the psychological and emotional needs of teenagers**. Authoritarian, autocratic coaching styles are incompatible with understanding the needs of teenagers who are struggling with developing positive self-esteem.

   * **Greater sensitivity to the needs of youth**, with the realization that many youth are playing for reasons other than competition and skill development. Those who participate in athletics for social reasons must also be accommodated. In fact, wholesome social interaction may be one of the most worthy contributions of sports to personal development.

   * **Greater attention to being an effective teacher**, especially in the teaching of skill progressions to appropriate age and skill levels. Inept teaching was mentioned frequently as a reason why youth dropped out of sport and, likewise, as a condition for change if they were to return to athletics.

   * **Emphasis on teammwork and cooperation in order to reach common goals.**

   * **More attention to effective communication**. Inappropriate communication (yelling at players, use of derogatory comments) was cited as a primary change that would have to be made in order to induce those who dropped out to rejoin sport. In addition, ineffective communication also seems

to be associated with such prevalent reasons for leaving sport as "I didn't like the coach," "I never felt I was part of the team," "I felt embarrassed at how I looked in my uniform."

* **Contra-indicated activities** should be identified for youth sport coaches, along with appropriate alternatives.

* Because they are in the best position to reduce their occurrence, **youth sport coaches must acquire knowledge and skill in identifying and preventing athletic injuries.**

* **Coaches must design practices involving as many components of fitness as are practical** in daily activities.

18. School districts must **avoid hiring non-teachers as coaches** unless they are properly educated for the role and they are supportive of educational goals.

19. **Schools and community programs should work together in the provision of exemplary physical activity programs for children and youth. School systems should provide daily physical education classes taught by professional physical educators.**

20. **More minority role models (women and men) as coaches and counselors must be involved in both the school and non-school sport programs.** Administrators must be educated about their bias in defining qualifications for coaching and administrative roles.

21. Coaches must be aware of the **differences in reasons for participating in sport** by males and females and different ethnic groups.
    * **Females** may be under greater stress as performing athletes due to societal definitions of gender roles than males and may **need more positive reinforcement**.

- Females will generally have two years less experience in a specific sport than males of a comparative age. Therefore, **cross-gender comparison of skills may be inappropriate**. Co-ed teams that are based on chronological age may be unfair to girls because of their inexperience.

- **Females**, while in puberty, **may feel awkward and hesitate** to participate in sports. More female role models as coaches and counselors would provide the supportive environment that girls need during these formative years when so many elect not to try out for a sport or who try and then leave after a disappointing experience.

- Females express a greater **aversion to rough play and contact sports** than males, although rough play is also frequently cited as a reason for dropping out by younger males. These situations should be avoided by strict adherence to the rules that protect players from rough play and by additional rule modifications in sports such as softball, soccer, basketball, football and ice hockey where the essence of the game can be realized with reduced contact.

22. Agencies that sponsor youth sports **should prepare a film on training and conditioning** for youth sport coaches showing appropriate conditioning activities for each age group that can be incorporated in a practice session.

23. National youth organizations have an expanded role to play in providing youth sports programs particularly in the inner cities through the provision of non-traditional activities. This category of activities includes sports that emphasize personal achievement and the promotion of self-confidence.

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Guidelines for Coaching Education: Youth Sports has been endorsed by the following organizations:

Amateur Basketball Association United States of America
Amateur Hockey Association of the United States
American Baseball Coaches Association
American Coaching Effectiveness Program
American Youth Soccer Organization
Canadian Federation of Amateur Baseball
Canadian Rhythmic Sportive Gymnastic Federation
Coaching Association of Canada
Dixie Baseball, Inc
Field Hockey Association of America, Inc.
International Softball Congress
National Rifle Association of America
National Roller Skating Coaches Associations
National Strength and Conditioning Association
Navy Recreational Services Department
North American Youth Sport Institute
Pony Baseball
The American Swimming Coaches Association
The Canadian Soccer Association
The Lacrosse Foundation
The National Youth Sports Coaches Association
The President's Council on Physical Fitness and Sports
The United States Weightlifting Federation, Inc.
United States Association for Blind Athletes
United States Association of Independent Gymnastic Clubs
United States Baseball Federation
United States Soccer Federation
United States Squash Racquets Association Incorporated
United States Table Tennis Association
United States Team Handball Federation
United States Tennis Association
YMCA of the USA
Youth and Education Services Office—U.S. Army Community and Family Support Center
Youth Sports Institute

The following have contributed their time, efforts, thoughts and ideas in the development of these guidelines

Dr. Jerry Thomas, Louisiana State University
Chair, Youth Sports Coalition
Mr. Roy Gillespie, PONY Baseball
Dr. Dan Gould, University of Illinois—Urbana
Dr. Vern Seefeldt, Michigan State University
Dr. Maureen Weiss, University of Oregon

NASPE, An Association of the American Alliance for Health, Physical Education, Recreation and Dance

National Association for
Sport & Physical Education
1900 Association Drive
Reston, VA 22091

Non-Profit Org.
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Reston, VA

Appendix A

Guidelines for Coaching Education:

Youth Sports

Prepared by the
Youth Sports Coalition of the
National Association for Sport & Physical Education
with representatives from the
National Council of Youth Sports Directors

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Youth sport coaches occupy a prominent place in the lives of millions of young athletes. Most of these coaches are volunteers who have little formal coaching education. A lack of salary or coaching education, however, does not relieve the youth sport coach of his/her other responsibilities. In fact, the courts have consistently ruled that youth sport coaches are responsible for their actions. Additionally, educators have continually emphasized that only when quality coaching occurs are the benefits of youth sports participation achieved.

A need exists to better educate America's youth sport coaches. Unfortunately, few guidelines exist for those individuals interested in developing youth sport coaching education programs, and/or evaluating the content used in existing programs. The following guidelines identify the major content areas or themes which should be covered in beginning level youth sport coaching education programs. Minimal curricular objectives of knowledge and performance which should be included under these general content areas are also identified. Finally, several recommendations for implementing coaching education programs are suggested.

Curricular Objectives for Youth Sport Coaches

Scientific Bases of Coaching

A Medical Legal Aspects of Coaching

Every young athlete should be provided a safe and healthful environment in which to participate. The coach should have basic knowledge and skills in the prevention of athletic injuries, and basic knowledge of first aid.

Every Youth Sports Coach Should:

1 Demonstrate knowledge and skill in the prevention and care of injuries generally associated with participation in athletics.
2 Be able to plan and coordinate procedures for the emergency care of athletes.
3 Be knowledgeable about the legal responsibilities of coaching, including insurance coverage for the coach and athlete.
4 Recognize and insist on safe playing conditions and the proper use of protective equipment.
5 Be able to provide young athletes with basic information about injury prevention, injury reporting, and sources of medical care.

B Training and Conditioning of Young Athletes

Every youth sport athlete should receive appropriate physical conditioning for sports participation. The coach should use acceptable procedure in their training and conditioning programs.

Every Youth Sports Coach Should:

1. Be able to demonstrate the basic knowledges and techniques in the training and conditioning of athletes.
2. Recognize the developmental capabilities of young athletes and adjust training and conditioning programs to meet these capabilities.
3. Know the effects of the environmental conditions (e.g., heat, cold, humidity, air quality) on young athletes and adjust practice and games accordingly.
4. Be able to recognize the various indications of overtraining, which may result in injury and/or staleness in athletes, and be able to modify programs to overcome these consequences.

C. Psychological Aspects of Coaching

A positive social and emotional environment should be created for young athletes. The coach should recognize and understand the developmental nature of the young athlete's motivation for sport competition and adjust his/her expectations accordingly.

Every Youth Sports Coach Should:

1. Subscribe to a philosophy that emphasizes the personal growth of individuals by encouraging and rewarding achievement of personal goals and demonstration of effort, as opposed to overemphasis on winning.
2. Demonstrate appropriate behavior of young athletes by maintaining emotional control and demonstrating respect to athletes, officials and fellow coaches.
3. Demonstrate effective communication skills such as those needed to provide appropriate feedback, use a positive approach, motivate athletes, and demonstrate proper listening skills.
4. Emphasize and encourage discussion of matters concerning the display of sportsmanship in competitive and noncompetitive situations.
5. Be sufficiently familiar with the principles of motivation, including goal setting and reinforcement, in order to apply them in constructive ways.
6. Be able to structure practice and competitive situations to reduce undue stress, and/or to teach young athletes how to reduce any undue stress they experience related to performance.

D Growth, Development, and Learning of Young Athletes

Young athletes should have positive learning experiences. The coach should have a knowledge of basic learning principles and consider the influence of developmental level on the athlete's performance.

Every Youth Sports Coach Should:

1. Recognize the physical and cognitive changes that occur as children develop and how these changes influence their ability to learn sports skills.
2. Concentrate on the development of fundamental motor and cognitive skills that lead to improvement of specific sports skills.
3. Understand the physical and cognitive differences manifested by early and late maturers.

Techniques of Coaching

E. Techniques of Coaching Young Athletes

Every young athlete should have the opportunity to participate regularly in a sport of his/her choosing. The coach should provide guidance for successful learning and performance of specific sport techniques, based on the maturity level or proficiency of the athlete.

Every Youth Sports Coach Should:

1. Know the key elements of sports principles and technical skills and the various teaching styles that can be used to introduce and refine them.
2. Recognize that young athletes learn at different rates and accommodate these differences by flexibility in teaching styles.
3. Be able to organize and conduct practices throughout the season in order to provide maximal learning.
4. Be able to select appropriate skills and drills, and analyze errors in performance.
5. Be able to provide challenging but safe and successful experiences for young athletes by making appropriate modifications during participation.
6. Understand why rules and equipment should be modified for children's sports.

Implementation

These guidelines are considered the minimum levels toward which youth sport coaching education programs should strive. To cover the topics of Sections A to D requires at least three hours of clinic time plus additional home study. Another three hours should be devoted to the techniques of coaching session.

Presentations developed for the scientific bases of coaching (Sections A to D) should be as sport specific as possible. The frequent use of audiovisual aids such as videotapes, films, overheads, and slides is helpful. Presentations should be short, with numerous practical examples, as well as opportunities for practical exercises and questions. Having materials (books, pamphlets, self study exams, etc.) available for the coaches to study either prior to or following the clinic is essential for adequate coverage of the topics.

For additional information about youth sport coaching education materials and organizations, write the Youth Sports Coalition Steering Committee, 1900 Association Drive, Reston, VA 22091.

Recognizing the value of experience outside formal education and the practicum, it is highly recommended that the prospective coach should have participated in some competitive sport, preferably the sport to be coached.

CONCLUSION

It is the belief of this committee that in the hiring of interscholastic coaches, top priority be given to candidates with both teaching and coaching certification. Next priority is the candidate with this coaching certification only. The joint committee recognizes that non-certified coaches are being used in many situations. The committee encourages local school districts, state high school activity associations, and/or state boards of education to require non certified coaches to enroll in instructional programs leading to the attainment of coaching certification.

NOTE

THE Joint Committee on Coaching Certification has completed a survey on the current status of requirements for interscholastic coaches. Data were also obtained on voluntary coaching certification programs and state minimum requirements for coaches during 1986-87.

THE survey revealed that ten states have no established state standards which govern the hiring of interscholastic coaches. The most common requirement in the other 40 states is a teaching certificate, which is required for *all* coaches in 25 states. Five states require coaching certification for some or all of their coaches (Arkansas, Iowa, Minnesota, New York and Wyoming). There are nine states with voluntary coaching certification programs.

EXCEPTIONS to state regulations are common. Liability concerns, however, prompted one state activities association to discontinue the authorization of exceptions to avoid being held liable.

THE lack of coaching job openings with corresponding teaching openings has been a major factor in allowing many local school districts the authority to determine what standards effect the hiring of coaches.

THE survey results indicate continuation of a trend. This trend of hiring non-teachers to coach and requiring limited or no professional preparation is cause for concern about the educational value and safe conduct of interscholastic athletic programs.

THE complete survey results may be obtained by sending a self addressed, stamped envelope to: NASPE/NAGWS Survey, 1900 Association Drive, Reston, VA 22091.

NAGWS

For nearly a century, The National Association for Girls and Women in Sport (NAGWS) has been a significant force for the professional development and promotion of girls and women in sport. Founded in 1899, NAGWS has devoted itself to providing opportunities for girls and women in sport related disciplines and careers. The first intercollegiate championships for women were held in 1969 leading to the creation of the NAGWS structure, AIAW, in 1971. Rules for women's sports have been written and published since 1901.

Today, NAGWS serves the special interests of over 10,000 professionals involved in teaching, coaching, or officiating sports, and in athletic administration, athletic training, club sports and intramurals.

As a force for the future, NAGWS will continue in its leadership role as the premiere educational organization serving and promoting sport leadership and physical activity for all females.

NASPE

The National Association for Sport and Physical Education (NASPE) is the only national organization devoted to strengthening basic knowledge in sport and physical education, disseminating that knowledge among professionals and the general public, and putting knowledge into action in schools and communities across the nation.

NASPE serves the special interests of over 23,000 professionals including physical educators; coaches; athletic directors; athletic trainers; youth sport, fitness and intramural directors; physical education and sport administrators; students; researchers and sport scientists.

Founded in 1885, NASPE continues to enhance the role of physical education and sport in improving the quality of life for individuals through publications, award programs, clinics/conferences, position papers, guidelines, research, and public information programs.

AAHPERD

NACWS and NASPE are associations of the American Alliance for Health, Physical Education, Recreation and Dance. For membership information, write AAHPERD Membership, 1900 Association Drive, Reston, VA 22091.

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Appendix B

Coaching Certification

A Position Paper
Prepared by the

Joint Committee on
Coaching Certification

of the

National Association for Girls and Women
in Sport

National Association for Sport and
Physical Education

Athletics is afforded prominence in the educational process, and can have far-reaching effects physically, socially, emotionally and intellectually. The nature of the experience gained from participation in an athletic program is strongly influenced by the qualifications and competencies of the coach. Thus it is paramount that potential coaches be prepared through professional programs designed to develop coaching competencies. The following six components represent the essential elements for certifying coaches of athletics in education.

I. MEDICAL-LEGAL ASPECTS OF COACHING

BECAUSE WE BELIEVE the health, physical welfare and safety of the participant is a primary concern of the athletic program, the program shall provide for knowledge and competencies in first aid, care, prevention and recovery from athletic injuries.

II. HUMAN GROWTH AND DEVELOPMENTAL ASPECTS OF COACHING

BECAUSE WE BELIEVE applied knowledge of human growth and development can be related to health and safety, the program shall provide for knowledge and competencies in human growth and development with special emphasis on the practical application for training and conditioning.

III. PSYCHO-SOCIAL ASPECTS OF COACHING

BECAUSE WE BELIEVE it is essential that the coach provide positive leadership for appropriate player behavior in the athletic program, the program shall provide for knowledge and competencies in the behavioral aspects of athletic performance and the athlete's relationship with society.

IV. BIO-PHYSICAL ASPECTS OF COACHING

BECAUSE WE BELIEVE that application of the knowledge of anatomical, kinesiological and physiological principles provide a sound basis for maximizing performance and minimizing injury in athletic competition, the program shall provide knowledges and competencies in these scientific aspects of athletic performance.

V. THEORETICAL AND TECHNICAL ASPECTS OF COACHING

BECAUSE WE BELIEVE in a specific body of knowledge underlying the coaching process, the program shall provide for knowledges and competencies in the organization, theory and techniques of coaching.

VI. PRACTICUM IN ATHLETIC COACHING

BECAUSE WE BELIEVE professional laboratory experiences constitute an essential part of the education sequence for the preparation of athletic coaches, the program shall provide supervised practicum in athletic coaching.

Sports programs are safest, provide maximum opportunities for positive social-emotional development, and are most enjoyable where competent leadership is provided. The NAGWS/NASPE Joint Coaching Certification Committee strongly recommends that the certification of coaching procedures be upgraded throughout the United States.

COACHING CERTIFICATION COMPETENCIES

The following competencies are recommended to serve as guidelines to fulfill the six components of coaching certification:

I. MEDICAL-LEGAL ASPECTS OF COACHING

A. Condition athletes properly for each sport.
B. Utilize safe playing conditions and protective equipment.
C. Provide in-service education for student assistants.
D. Demonstrate skill in the prevention and care of injuries generally associated with athletics.
E. Identify and relate basic medical and safety information pertaining to athletic coaching.
F. Plan and coordinate procedures for emergency care.
G. Render appropriate emergency care.
H. Utilize a system of accident reporting.
I. Coordinate the roles of the coach and the trainer to the physician.
J. Provide for rehabilitation when appropriate.
K. Identify adequate athletic insurance coverage.
L. Understand the legal aspects of coaching liability.
M. Apply research findings appropriate to the above component.

II. HUMAN GROWTH AND DEVELOPMENTAL ASPECTS OF COACHING

A. Identify and relate to the sequential physical and motor development from adolescence through adulthood.
B. Provide experiences appropriate to the growth and development level of adolescents.
C. Analyze human performance in terms of developmental facts.
D. Identify problems of the adolescent and refer when necessary.
E. Identify and utilize methods and procedures for developing, training and conditioning athletes.
F. Analyze the concepts of vocation and avocation in terms of the relationship of interest and ability.
G. Apply research findings appropriate to the above component.

III. PSYCHO-SOCIAL ASPECTS OF COACHING

A. Motivate athletes toward immediate and long-range goals.
B. Relate and interpret the program to co-workers, athletes, parents, and the general public.
C. Identify and apply ethical conduct in athletics.
D. Integrate athletics with the total educational program.
E. Identify and interpret values which are developed from participation in sports.
F. Identify desirable leadership traits and structure experiences to develop them.
G. Identify with and participate in professional and related organizations.
H. Identify and utilize basic psychological and sociological principles related to coaching.
I. Identify factors and conditions affecting motor learning, particularly of the highly skilled.
J. Apply a humanistic approach to personalize a coaching philosophy.
K. Recognize and initiate procedures to resolve behavioral and emotional problems.
L. Maintain emotional stability under stress.
M. Recognize relationship between personality and socialization variables.
N. Apply research findings appropriate to the above component.

IV. BIO-PHYSICAL ASPECTS OF COACHING

A. Identify and utilize the mechanics of movements within body limitations.
B. Analyze performance based upon anatomical and mechanical principles.
C. Relate motor performance to individual body structure.
D. Relate human anatomy, physics, and movement to safety of the participant.
E. Relate motor performance to biomechanical analysis.
F. Identify functional systems and physiological factors for analyzing sports performance.
G. Identify the effects of environmental conditions and exercise upon the circulatory and respiratory systems.
H. Identify the effects of nutrition upon health and performance.
I. Identify the physiological response to training and conditioning.
J. Identify and interpret the use and effect of drugs upon the body.
K. Apply research findings appropriate to the above component.

V. THEORETICAL AND TECHNICAL ASPECTS OF COACHING

A. Identify and utilize principles involved in the fundamental skills of teaching and coaching.
B. Identify and utilize the specific skills, techniques and rules of the sport coached.
C. Identify and apply specific game tactics and strategy.
D. Organize and implement materials for scouting, practice planning and competitive situations.
E. Identify and utilize appropriate audiovisual materials and equipment.
F. Evaluate and select personnel involved in the athletic program.
G. Demonstrate organizational and administrative efficiency in implementing sports programs.
H. Understand the role of the coach and athlete in relationship to the official.
I. Evaluate athletic performance and programs.
J. Understand and enforce the rules and regulations of appropriate governing bodies.
K. Identify and utilize essentials governing contest management.
L. Apply research findings appropriate to the above component.

VI. PRACTICUM IN ATHLETIC COACHING

A. Demonstrate knowledge of skill development through practice planning.
B. Organize, conduct and evaluate practice sessions.
C. Assist in performance evaluation, game analysis and event management.
D. Experience appropriate planning for the age group and skill level involved.
E. Develop aspects of ones coaching philosophy.
F. Participate in school and community public relations activities.
G. Experience office and time management.
H. Review budgeting procedures and materials.
I. Assist with equipment maintenance and distribution.
J. Assist in psychological preparation.
K. Implement self-evaluation techniques.
L. Participate in performance appraisal with a cooperating coach.
M. Apply research findings appropriate to the above component.

Appendix C

Representatives of National Youth Sports Governing Agencies

AM Amateur Baseball Congress
(616) 781-2002
Joe Cooper, NCYS
118-119 Redfield Plaza Box 467
Marshall, MI 49068

AM Coaching Effectiveness
(800) 342-5457
Brad Ellenbecker, NCYS
Box 5076
Champaign, IL 61825-5076

AM Legion Baseball
(317) 635-8411
Jim Quinlan, NCYS
P.O. Box 1055
Indianapolis, IN 46206

AM Youth Soccer Organization
(213) 643-8066
John Chaffetz, NCYS
5403 West 138th Street
Hawthorne, CA 90250

Amateur Athletic Union USA
(317) 872-2900
Jerry Duhamell, NCYS
P.O. Box 68207
Indianapolis, IN 46268

Amateur Softball Assn.
(405) 424-5266
Don E. Porter, NCYS
2801 N.E. 50th Street
Oklahoma City, OK 73111

Babe Ruth Baseball/Softball
(609) 965-1434
Donald Tellefsen, NCYS
1770 Brunswich Avenue
Trenton, NJ 08638

Dixie Youth Baseball
(615) 821-6811
Nick Senter, NCYS
P.O. Box 222
Lookout Mountain, TN 37350

Little League Baseball, Inc.
(717) 326-1921
Creighton Hale, NCYS
P.O. Box 3485
Williamsport, PA 17701

National Pal
(407) 844-1823
Joseph F. Johnson, NCYS
200 Castlewood Dr.
North Palm Beach, FL 33408

Natl. Fed. of State H.S. Assoc.
(816) 464-5400
Donald E. Sparks, NCYS
11724 Plaza Circle
Kansas City, MO 64195

Natl. Youth Sport Coach Assn.
(407) 684-1141
D. Michael Pfahl, NCYS
2611 Olk Okeechobee Road
West Palm Beach, FL 33409

North Am. Youth Sport Inst.
(919) 784-4926
Jack Hutslar, NCYS
4985 Oak Garden Drive
Kernersville, NC 27284

Pony Baseball
(412) 225-1060
Abraham Key, NCYS
Box 225
Washington, PA 15301

Special Olympics
(202) 628-3630
Thomas Songster, NCYS
1350 New York Ave. NW #500
Washington, DC 20005-4709

Sport for Understanding
(800) 424-3691
Karen Yoho, NCYS
3501 Newark Street, NW
Washington, DC 20016

USA Hockey, Inc.
(719) 576-4990
Val Belmonte, NCYS
2997 Broadmoore Valley Road
Colorado Springs, CO 80906

USA Wrestling
(719) 597-8333
Mike Hagerty, NCYS
225 South Academy Blvd.
Colorado Springs, CO 80910

U.S. Baseball Federation
(609) 586-2381
Wanda Rutledge, NCYS
2160 Greenwood Avenue
Trenton, NJ 08609

U.S. Field Hockey Assn. Inc.
(719) 578-4567
Karen Collins, NCYS
1750 E. Boulder Street
Colorado Springs, CO 80909-57

U.S. Figure Skating Assn.
(719) 635-5200
Leslie R. Gamez, NCYS
20 First Street
Colorado Sprints, CO 80909-36

U.S. Youth Soccer Assn.
(901) 362-5183
Larry Austin, NCYS
1835 Union Ave., Ste. 190
Memphis, TN 38104

United States Volleyball Assoc.
(719) 637-8300
Ray Thompsett, NCYS
3595 E. Fountain Blvd.
Colorado Springs, CO 80910

Young Amer. Bowling Alliance
(414) 421-4700
David W. Patrick, NCYS
5301 South 76th Street
Greendale, WI 53129

Youth Basketball of Am. Inc.
(407) 363-9262
Donald A. Ruedlinger, NCYS
P.O. Box 36108
Orlando, FL 32823

Youth Sports Institute
(517) 353-6689
Vern Seefeldt
213 I.M. Sports Circle, MSU
East Lansing, MI 48824